

AMR093 - AIRBORNE FIBRE MONITORING REPORT

DATE OF ISSUE:	15/4/2014	JOB NAME:	Randwick Barracks Asbestos Removal	JOB NUMBER:	43153
SITE ADDRESS:	Randwick Barracks, Randwick NSW	CLIENT:	Baulderstone Pty Ltd	CLIENT CONTACT:	Doug Wu
DOCUMENT NUMBER:	JBS&G 43153-57444	SAMPLER/S:	Matthew O'Brien	ROTAMETER ID:	R002
SAMPLING DATE:	14/4/2014	ANALYSIS DATE:	14/4/2014		

TEST METHOD: Estimation of Airborne Asbestos Fibres and Synthetic Mineral Fibres by the Membrane Filter Method. Dust particles collected and filters examined in accordance with the Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres [NOHSC:3003 (April 2005)], and Safer Environments Method 2. Australian Safer Environment & Technology Pty Ltd NATA Accreditation No: 14484.

Pump ID	Lab ID	Filter ID	Location Description	Start Time	Flow Rate Start (L/min)	End Time	Flow Rate End (L/min)	Average Flow Rate (L/min)	Result (Fibres/Field)	Result (Fibres/mL)
SKC 150	ASET38490-1	A65	North boundary adjacent shed area	07:45	1.500	12:50	1.500	1.500	0/0	<0.01
SKC 006	ASET38490-2	A7	West boundary along Avoca St.	07:47	1.500	12:52	1.500	1.500	1/0	<0.01
SKC 135	ASET38490-3	A229	South boundary adjacent residential houses	07:49	1.500	12:54	1.500	1.500	1.5/0	<0.01
SKC 009	ASET38490-4	A176	East facing adjacent entry gate	07:51	1.500	12:56	1.500	1.500	1/0	<0.01
NA	ASET38490-5	A165	Field Blank	-	-	-	-	-	1/100	-

DESCRIPTION OF WORKS: Asbestos removal works

NOTE: The results contained in this report relate only to the sample/s submitted for analysis

COMMENT: The calculated concentrations for the samples analysed are less than the minimum control action level of 0.01 fibres/mL for control monitoring as outlined in the Code of Practice - *How to Safely Remove Asbestos* (Safe Work Australia 2011).

Prepared & Approved by:



Michael Samuel
 Licensed Asbestos Assessor (LAA 000157)
 Operations Manager – Hazardous Materials and Air Monitoring
JBS&G (NSW & WA) Pty Ltd



Attachment 1 – Laboratory Reports

Certificate of Analysis

JBS & G (NSW & WA) Pty Ltd
Level 1, 50 Margaret St
Sydney
NSW 2000



NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025.
 The results of the tests, calibrations and/or
 measurements included in this document are traceable
 to Australian/national standards.

Attention: **Michael Samuel**

Report **415246-A**
 Client Reference 43153
 Received Date Apr 14, 2014

Client Sample ID			A65	A7	A229	A176
Sample Matrix			Air	Air	Air	Air
Eurofins mgt Sample No.			S14-Ap12167	S14-Ap12168	S14-Ap12169	S14-Ap12170
Date Sampled			Apr 14, 2014	Apr 14, 2014	Apr 14, 2014	Apr 14, 2014
Test/Reference	LOR	Unit				
Asbestos (fibre count in air)			see attached	see attached	see attached	see attached

Client Sample ID			A165
Sample Matrix			Air
Eurofins mgt Sample No.			S14-Ap12171
Date Sampled			Apr 14, 2014
Test/Reference	LOR	Unit	
Asbestos (fibre count in air)			see attached

Company Name: JBS & G (NSW & WA) Pty Ltd Address: Level 1, 50 Margaret St Sydney NSW 2000 Client Job No.: 43153	Order No.: Report #: 415246 Phone: 02 8245 0300 Fax:	Received: Apr 14, 2014 4:02 PM Due: Apr 14, 2014 Priority: Same day Contact Name: Michael Samuel
Eurofins mgt Client Manager: Jean Heng		

Sample Detail					Asbestos (fibre count in air)
Laboratory where analysis is conducted					
Melbourne Laboratory - NATA Site # 1254 & 14271					
Sydney Laboratory - NATA Site # 18217					
Brisbane Laboratory - NATA Site # 20794					
External Laboratory					X
Sample ID	Sample Date	Sampling Time	Matrix	LAB ID	
A65	Apr 14, 2014	12:50PM	Air	S14-Ap12167	X
A7	Apr 14, 2014	12:52PM	Air	S14-Ap12168	X
A229	Apr 14, 2014	12:54PM	Air	S14-Ap12169	X
A176	Apr 14, 2014	12:56PM	Air	S14-Ap12170	X
A165	Apr 14, 2014		Air	S14-Ap12171	X

Eurofins | mgt Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Actual PQLs are matrix dependant. Quoted PQLs may be raised where sample extracts are diluted due to interferences.
4. Results are uncorrected for matrix spikes or surrogate recoveries.
5. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
6. Samples were analysed on an 'as received' basis. 7. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Acknowledgment.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

****NOTE:** pH duplicates are reported as a range NOT as RPD

UNITS

mg/kg: milligrams per Kilogram

mg/l: milligrams per litre

ug/l: micrograms per litre

ppm: Parts per million

ppb: Parts per billion

%: Percentage

org/100ml: Organisms per 100 millilitres

NTU: Units

MPN/100mL: Most Probable Number of organisms per 100 millilitres

TERMS

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery
CRM	Certified Reference Material - reported as percent recovery
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands. In the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
Batch Duplicate	A second piece of analysis from a sample outside of the clients batch of samples but run within the laboratory batch of analysis.
Batch SPIKE	Spike recovery reported on a sample from outside of the clients batch of samples but run within the laboratory batch of analysis.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
ASLP	Australian Standard Leaching Procedure (AS4439.3)
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within
TEQ	Toxic Equivalency Quotient

QC - ACCEPTANCE CRITERIA

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries : Recoveries must lie between 50-150% - Phenols 20-130%.

QC DATA GENERAL COMMENTS

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxophene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxophene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Arochlor 1260 in Matrix Spikes and LCS's.
9. For Matrix Spikes and LCS results a dash " - " in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPD's are calculated from raw analytical data thus it is possible to have two sets of data.

Comments**Sample Integrity**

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	No
Sample correctly preserved	Yes
Organic samples had Teflon liners	No
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	Yes

Authorised By

Jean Heng Client Services

**Dr. Bob Symons****Laboratory Manager**

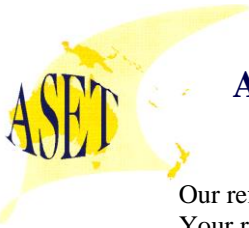
Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Uncertainty data is available on request

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Our ref : ASET38490 /41670 / 1-5
Your ref : 415246
NATA Accreditation No:14484.

14 April 2014

Eurofins MGT
Unit F3, Building F, 16 Mars Road
Lane Cove NSW 2066

Attn: Dr Robert Symons

1.Introduction

This report presents the results of five control air monitoring samples forwarded for analysis by Eurofins MGT on 14 April 2014.

2. Methods:

In accordance with the Worksafe Australia Guidance Notes on Membrane Filter Method on estimating air borne asbestos fibres- Second Edition – NOHSC – 3003 (2005) and (Safer Environment Method 2).

3.Results.

<u>Location</u>	<u>Fibres/ 100 Fields</u>
14/4/2014	
1- ASET38490 / 41670 / 1 - A65 - Ap12167	0.0 / 100
2- ASET38490 / 41670 / 2 - A7 - Ap12168	1.0 / 100
3- ASET38490 / 41670 / 3 - A229 - Ap12169	1.5 / 100
4 -ASET38490 / 41670 / 4 - A176 - Ap12170	1.0 / 100
5- ASET38490 / 41670 / 5 - A165 - Ap12171	0.0 / 100

Analysed and reported by,

Mahen De Silva. BSc, MSc, Grad. Dip(Occ: Hyg).
Occupational Hygienist / Approved Signatory,
Approved counter.



Accredited for compliance with ISO/IEC 17025.