Appendix F

OMP Sampling Event Reports

Sampling Event Report August 2025

PFAS OMP – HMAS Albatross

Department of Defence

03 March 2026

→ **The Power of Commitment**

Acknowledgement of Country

GHD acknowledges Aboriginal and Torres Strait Islander peoples as the Traditional Custodians of the land, water and sky throughout Australia on which we do business. We recognise their strength, diversity, resilience and deep connections to Country. We pay our respects to Elders of the past, present and future, as they hold the memories, knowledges and spirit of Australia. GHD is committed to learning from Aboriginal and Torres Strait Islander peoples in the work we do.

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Document title		Sampling Event Report August 2025 | PFAS OMP – HMAS Albatross					
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List of acronyms

Acronym	Term
AEC	Area of Environmental Concern
AFFF	Aqueous Film Forming Foam
ASC	Assessment of Site Contamination
CSR	Contaminated Site Records
DCMM	Defence Contamination Management Manual
Defence	Department of Defence
DO	Dissolved Oxygen
DQI	Data Quality Indicator
DQO	Data Quality Objective
EC	Electrical Conductivity
HEPA	Heads of Environment Protection Authority
HHERA	Human Health and Ecological Risk Assessment
LOR	Limit of Reporting
NATA	National Analytical Testing Authority
NEMP	National Environmental Management Plan
NEPM	National Environment Protection Measure
NHMRC	National Health and Medical Research Council
NSW	New South Wales
OMP	Ongoing Monitoring Plan
ORP	Oxidation Reduction Potential
PFAS	Per- and poly-fluoroalkyl substances
PFHxS	Perfluorohexane sulfonic acid
PFOA	Perfluorooctanoic acid
PFOS	Perfluorooctane sulfonic acid
pH	Potential of Hydrogen
RAN	Royal Australian Navy
QA/QC	Quality Assurance and Quality Control
SAQP	Sampling and Analysis Quality Plan
TDS	Total Dissolved Solids

List of units

Units	Term
°C	Degrees Celsius
km	Kilometre
m	Metre
mg/L	Milligrams per Litre
mV	Millivolts
µg/L	Micrograms per Litre
µS/cm	MicroSiemens per Centimetre

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Table index

Appendices

1. Introduction

GHD Pty Ltd (GHD) has been engaged by the Department of Defence (Defence) to implement the per- and poly-fluoroalkyl substances (PFAS) Ongoing Monitoring Plan (OMP) at His Majesty's Australian Ship (HMAS) Albatross (hereafter referred to as the 'site') located at Albatross Road, Nowra Hill NSW 2540.

The OMP (Defence, 2025) outlines the sampling requirements for the site and off-site areas within the Management Area. The location of the site and Management Area is displayed in Figure 1, Appendix A. The site layout, including Areas of Environmental Concern (AECs) and Contaminated Site Records (CSRs) are displayed in Figure 2, Appendix A.

This Sampling Event Report has been prepared to report the results of the August 2025 surface water sampling event in accordance with the Defence (2024) Ongoing Monitoring Program Reporting Guidance.

1.1 Objectives

The objective of this work was to conduct surface water monitoring in accordance with the Sampling and Analysis Quality Plan (SAQP) (GHD, 2025).

The key objectives of OMP sampling events are to:

– Monitor the nature and extent (spatial and temporal) of PFAS impact in surface water pathways associated with site sources of PFAS derived from the historical use of aqueous film forming foam (AFFF).
– Monitor the migration of PFAS in surface water from the site using data obtained from this monitoring event.
– Provide confirmation of the current understanding of risk.
– Provide supporting data for assessment of management actions, where relevant.

1.2 Limitations

This report has been prepared by GHD for Department of Defence and may only be used and relied on by Department of Defence for the purpose agreed between GHD and Department of Defence as set out in Section 1.1 of this report.

GHD otherwise disclaims responsibility to any person other than Department of Defence arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report. GHD disclaims liability arising from any of the assumptions being incorrect.

GHD has prepared this report of the basis of information provided by Department of Defence and others who provided information to GHD, which GHD has not independently verified or checked beyond the agreed scope of work. GHD does not accept liability in connection with such unverified information, including errors and omissions in the report which were caused by errors or omissions in that information.

2. Scope of work

The scope of work was completed in general accordance with the SAQP (GHD, 2025) and included the following:

– Collection of surface water samples and water quality parameters at 19 surface water locations.
– Analysis of samples for PFAS (standard 30 suite).
– Uploading field and laboratory data to the Defence ESdat database.
– Preparation of this Sampling Event Report.

A summary of sampling locations and details is presented in Table 1.

Table 1 Summary of sampling locations and details

Location / Area	Sub-catchment	Location ID	Total
On-site	Braidwood Road drain	0026_SW007	2
		0026_SW018	
	Yerriyong Gully	0026_SW009	4
		0026_SW012	
		0026_SW106	
		0026_SW123	
Off-site	Braidwood Road drain	0026_SW005	4
		0026_SW006	
		0026_SW020	
		0026_SW124	
	Cabbage Tree Creek	0026_SW187	1
	Lower Calymea Creek	0026_SW004B	1
	Flat Rock Creek	0026_SW002	1
	Parma Creek	0026_SW013	2
		0026_SW014	
	Upper Currambene Creek	0026_SW008	3
		0026_SW049	
		0026_SW185	
	Lower Currambene Creek	0026_SW188	1
Total			**19**

2.1 SAQP deviations

Deviations from the SAQP (GHD, 2025) are presented in Table 2.

Table 2 Summary of deviations from the SAQP

Deviation	Justification	Impact on dataset
0026_SW188 location moved 200 m downstream (28079, 6127201 / 34°58'26.6"S 150°35'55.7"E)	The original location requires access from private properties along Princes Highway and Falls Road, Falls Creek.	Moving the 0026_SW188 sampling location 200 m downstream is considered to have a minimal impact on the dataset, as it still allows characterisation of PFAS in the surface water of Lower Currambene Creek.
No sample was obtained from 0026_SW186	No access, locked gate from Yalwal Road. Private property access is required.	The absence of a sample at 0026_SW186 is considered to have a minor impact on the dataset, as a sample was collected at 0026_SW004B which still provides a data point in the Lower Calymea Creek Sub-Catchment.
No sample was obtained from 0026_SW065	No access. Private property access is required.	The absence of a sample at 0026_SW065 is considered to have a minor impact on the dataset, as three other samples were collected within the Upper Currambene Creek Sub-Catchment.

3. Methodology

3.1 Sampling methodology

The surface water sampling methodology used during this event was in accordance with the SAQP (GHD, 2025) and is presented in Table 3.

Table 3 Summary of sampling methodology

Item	Details
Technical guidelines	– AS/NZS 5667.1:1998 Water Quality – Sampling, Part 1: Guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples (Standards Australia, 1998a). – AS/NZS 5667.6:1998 Water Quality – Sampling, Part 6: Guidance on the Sampling of rivers and streams (Standards Australia, 1998b). – ASC NEPM (NEPC, 2013). – NEMP 3.0 (HEPA, 2025).
Sampling methodology	Surface water samples were collected via 'grab sample' at the sampling locations from mid-way within the water column or approximately 0.5 metres below the surface. Care was taken when sampling so that sediment was not disturbed, and that surface film or floating materials were not captured in the sample. At each location, a new laboratory supplied container was lowered into the water (either by hand or using an extendable sampling pole) with the cap immediately applied once the container was full. The sample containers were labelled with the job number, sample identification and date collected in accordance with the nomenclature set out in the SAQP (GHD, 2025).
Water quality parameters	Water quality parameters – potential of hydrogen (pH), electrical conductivity (EC), oxidation reduction potential (ORP), dissolved oxygen (DO), total dissolved solids (TDS) and temperature – were measured and recorded at all monitoring locations. In addition, observations of water quality such as the colour, turbidity level, and the presence/absence of odour or sheen were recorded. Geochemical field parameters were collected using a calibrated water quality meter (WQM). The calibration certificate is provided in Appendix D.
QA/QC samples	The QA/QC program was conducted in accordance with the SAQP (GHD, 2025) which included: – 2 x intra-laboratory duplicates, which met the target frequency. – 2 x inter-laboratory duplicates, which met the target frequency. – 1 x trip blank, which met the target frequency.

3.2 Adopted screening criteria

The adopted screening criteria for this monitoring program are outlined in the SAQP (GHD, 2025) and is presented in Table 4.

Table 4 Summary of adopted screening criteria

Receptor	Guideline	Compound	Criteria (µg/L)
Human health	NEMP 3.0 (HEPA, 2025) Recreational	PFOS + PFHxS	2
		PFOA	10
Ecological	NEMP 3.0 (HEPA, 2025) Freshwater 99% species protection	PFOS	0.00023
		PFOA	19

3.3 Quality assurance and quality control

Quality assurance (QA) involves all the actions, procedures, checks and decisions undertaken to ensure the representativeness and integrity of samples and the accuracy and reliability of analytical results (NEPC, 2013). Quality control (QC) involves protocols to monitor and measure the effectiveness of QA procedures. The data quality objectives (DQOs) and data quality indicators (DQIs) adopted for these works are presented in the SAQP (GHD, 2025).

A review of the field and laboratory QA/QC performance from the investigation is presented in the QA/QC data validation report in Appendix C. The QA/QC assessment concluded that the collected data is considered appropriate for the work undertaken and are adequate for the purpose of this assessment.

All data collected during this event has been reviewed and uploaded to the Defence ESdat database in accordance with Defence Contamination Management Manual (DCMM) requirements (Defence, 2021).

4. Field observations and results

4.1 General observations

General observations made during this sampling event are presented in Table 5.

Table 5 Summary of general observations

Items	Observations
Weather Conditions	Sampling was undertaken on 28 and 29 August 2025 with the weather observed to be: – Cool, with temperatures ranging between 10.8 °C and 19.5 °C. – Mostly dry with 0.6 mm of rainfall recorded over both days. Cumulative rainfall in the 72 hours prior to sampling was 1 mm. Information obtained from Nowra RAN Air Station AWS (Station 068072) (Bureau of Meteorology, 2025).
Estate Management Works, Training Activities and/or Construction Works.	Ongoing construction works were observed during the sampling event, including for: – Asphalt batching plant, stockpiling and laydown area is located approximately 85 m south of SW007. – Earthworks associated with carpark upgrade on the western side of the site, north of the Romeo Facility. The closest point of these earthworks is approximately 85 metres south of SW007.

4.2 Field observations and measurements

Field observations and water quality parameters recorded during the sampling event are presented in Table 6.

Table 6 Summary of field observations and measurements

Item	Description
Access and Sample Collection	All sampling locations were accessible and able to be sampled except for 0026_SW065 and 0026_SW186 which require access from private properties (as detailed in Table 3).
Water Observations	Surface water observations were recorded as part of the field investigations and are summarised below: – Water was predominantly pale brown with low-moderate turbidity. – Foam was observed at 0026_SW005 and 0026_SW006, which is consistent with historic observations. – Brittle bacteria sheens were observed at 0026_SW002 and 0026_SW007, with suspected algae particles also noted at 0026_SW007. – No odours were noted at any location. – 15 locations were observed to be flowing and ranged from fast to slow. Four locations with no flow observed were 0026_SW007, 0026_SW009, 0026_SW018 and 0026_SW123. – Other environmental observations including weather, temperature, slope and erosion were recorded on the field sheets, attached in Appendix F.
Water quality Parameters	Water quality parameters were measured during the collection of surface water samples. The readings are presented in Table B1 in Appendix B and are summarised below: – Dissolved oxygen ranged from 5.82 mg/L (SW007) to 33.50 mg/L (SW049), indicating well to poorly oxygenated conditions. – Electrical conductivity ranged from 61.3 µS/cm (SW004B) to 989.0 µS/cm (SW124), indicating freshwater conditions. – pH ranged from 6.50 (SW007) to 7.78 (SW124), indicating slightly acidic to slightly alkaline conditions. – Redox ranged from 49.6 mV (SW007) to 135.5 mV (SW018), indicating mildly oxidising conditions. – Temperatures were cool and ranged from 9.4 ˚C (SW018) to 14.0 ˚C (SW124). – TDS ranged from 53.30 mg/L (SW004B) to 812.50 mg/L (SW124), indicating a wide range of concentrations of dissolved solids at sampling locations across the site. Field notes are attached in Appendix F.

4.3 Analytical results

The analytical results from this sampling event are presented in Table B2 of Appendix B and the Historic surface water sampling results are presented in Table B3 of Appendix B. In summary:

– PFAS was detected above the LOR in all 19 primary samples except 0026_SW014.
– All 19 primary samples exceeded the adopted ecological 99% freshwater screening criteria.
– Nine primary samples exceeded the adopted human health recreational screening criteria.

A comparison of results from this sampling event to historic data is presented in Table 7.

Table 7 Summary of analytical results

Item	Sample location	PFOS+PFHxS (µg/L)		PFOA (µg/L)		PFOS (µg/L)	
		August 2025	Previous Max	August 2025	Previous Max	August 2025	Previous Max
New exceedance of human health criteria? (BOLD)	0026_SW049	**2.95**	1.27	0.08	0.02	1.45	0.81
New historical maximum (BOLD)	0026_SW049	**2.95**	1.27	**0.08**	0.02	**1.45**	0.81
	0026_SW106	**15.3**	9.53	0.24	0.24	**11.4**	5.13
	0026_SW123	**0.04**	<0.01	<0.01	<0.01	**0.01**	<0.01
	0026_SW124	**18.6**	15.2	0.40	0.43	**8.6**	6.04

A summary of results from the locations added to this sampling event in presented in Table 8.

Table 8 Summary of new sampling locations

Location	PFOS+PFHxS (µg/L)	PFOA (µg/L)	PFOS (µg/L)	Exceeds ecological screening criteria	Exceeds human health screening criteria
0026_SW185	2.66	0.08	1.16	Yes	Yes
0026_SW187	0.25	<0.01	0.16	Yes	No
0026_SW188	0.16	<0.01	0.10	Yes	No

PFOS and PFHxS results are displayed in Figure 4, Appendix A and PFOA results are displayed in Figure 5, Appendix A.

5. Summary and recommendations

The findings and recommended actions from this sampling event are presented in Table 9.

Table 9 Summary of sampling event

Item	Findings	Recommended Action
Access to sampling locations	The following locations were not able to be sampled due to access restrictions: – 0026_SW065. – 0026_SW186. It is also noted that sampling location 0026_SW188 was also moved 200 m downstream due to access restrictions.	Access should be sought from private properties so a complete dataset can be collected.
Analytical results	19 primary surface water samples were analysed.	Nil.
New historical maximums and exceedances	The following locations reported new historical maximums: – 0026_SW049. – 0026_SW106. – 0026_SW123. – 0026_SW124. 0026_SW049 also exceeded the human health screening criteria for the first time.	Assessment of these historical maximums should be undertaken in the next OMR report.
New sampling locations	The following three locations were sampled for the first time during this event: – 0026_SW185. – 0026_SW187. – 0026_SW188. All three locations reported PFAS concentrations that exceeded the ecological screening criteria, while 0026_SW185 also exceeded the human health screening criteria.	Now that baseline conditions have been established at these locations, they should continue to be monitored for during future OMP sampling events.
Revision to the conceptual site model (CSM)	The following locations were difficult to access and had shallow water (<0.3 m): – 0026_SW049. – 0026_SW185. These sites are not publicly accessible as they are situated on either Commonwealth land or private property. Access was only possible via gated entry points along Defence-controlled perimeter roads or through adjoining private land.	Assessment of whether recreational criteria is appropriate for these locations should be undertaken in the next OMR report.

– The next OMP sampling event is scheduled for February 2026, which is an annual groundwater and surface water monitoring event.
– The next OMR is scheduled to be delivered in Q4 2025, covering data collected within the 12-month sampling period.

6. References

AECOM. (2020 - 2024). Ongoing Monitoring Program - Reports for sampling events between December 2019 - Feburary 2024.

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NEPC. (2013). National Environment Protection (Assessment of Site Contamination) Measure. National Environment Protection Council.

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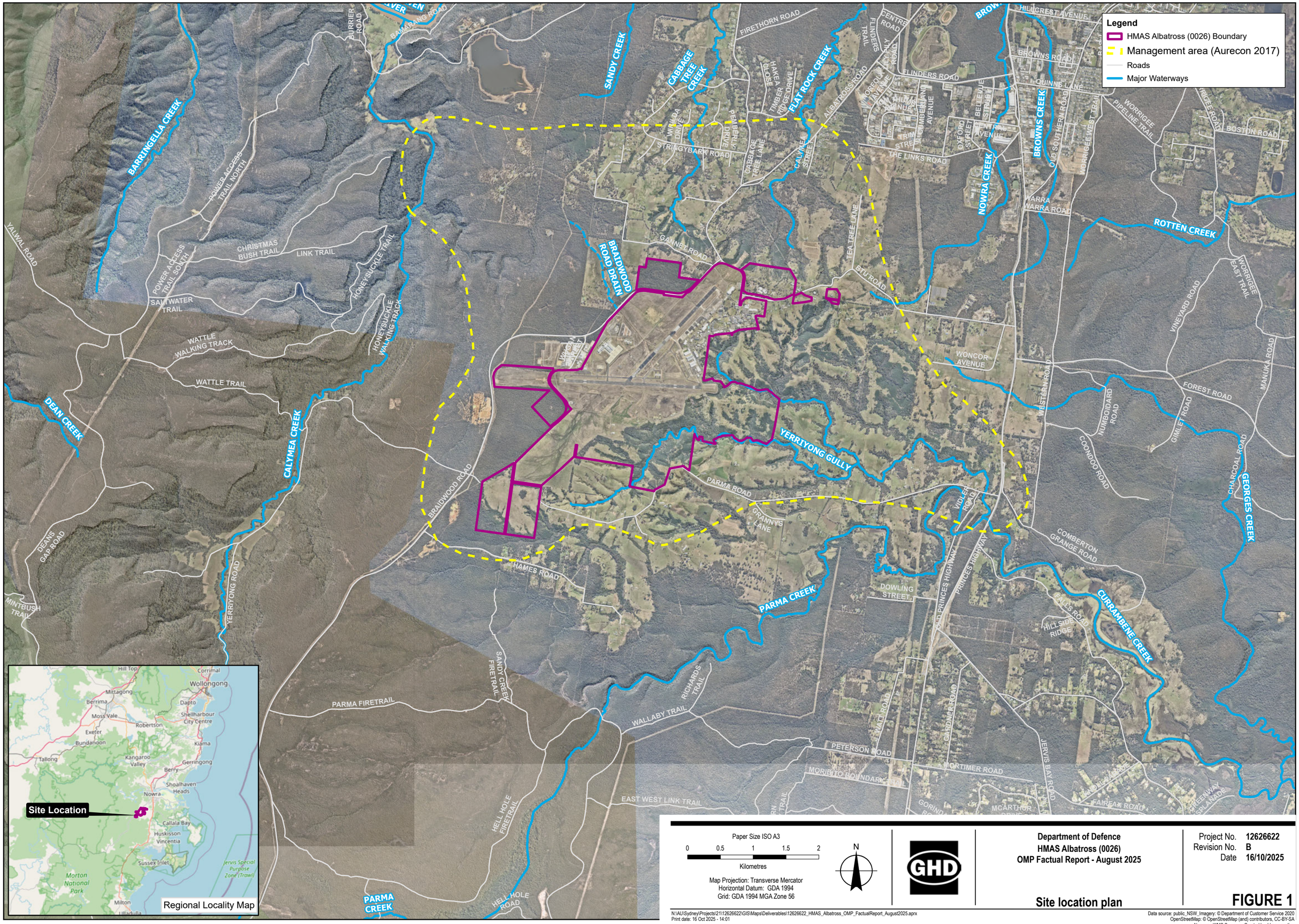
Standards Australia. (1998b). AS/NZS 5667.6:1998 Water quality - Sampling Part 6: Guidance on sampling of rivers and streams.

Appendices

Appendix A

Figures



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Kilometres

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Site location plan

Project No. **12626622**
Revision No. **B**
Date **16/10/2025**

FIGURE 1

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OpenStreetMap: © OpenStreetMap (and) contributors, CC-BY-SA
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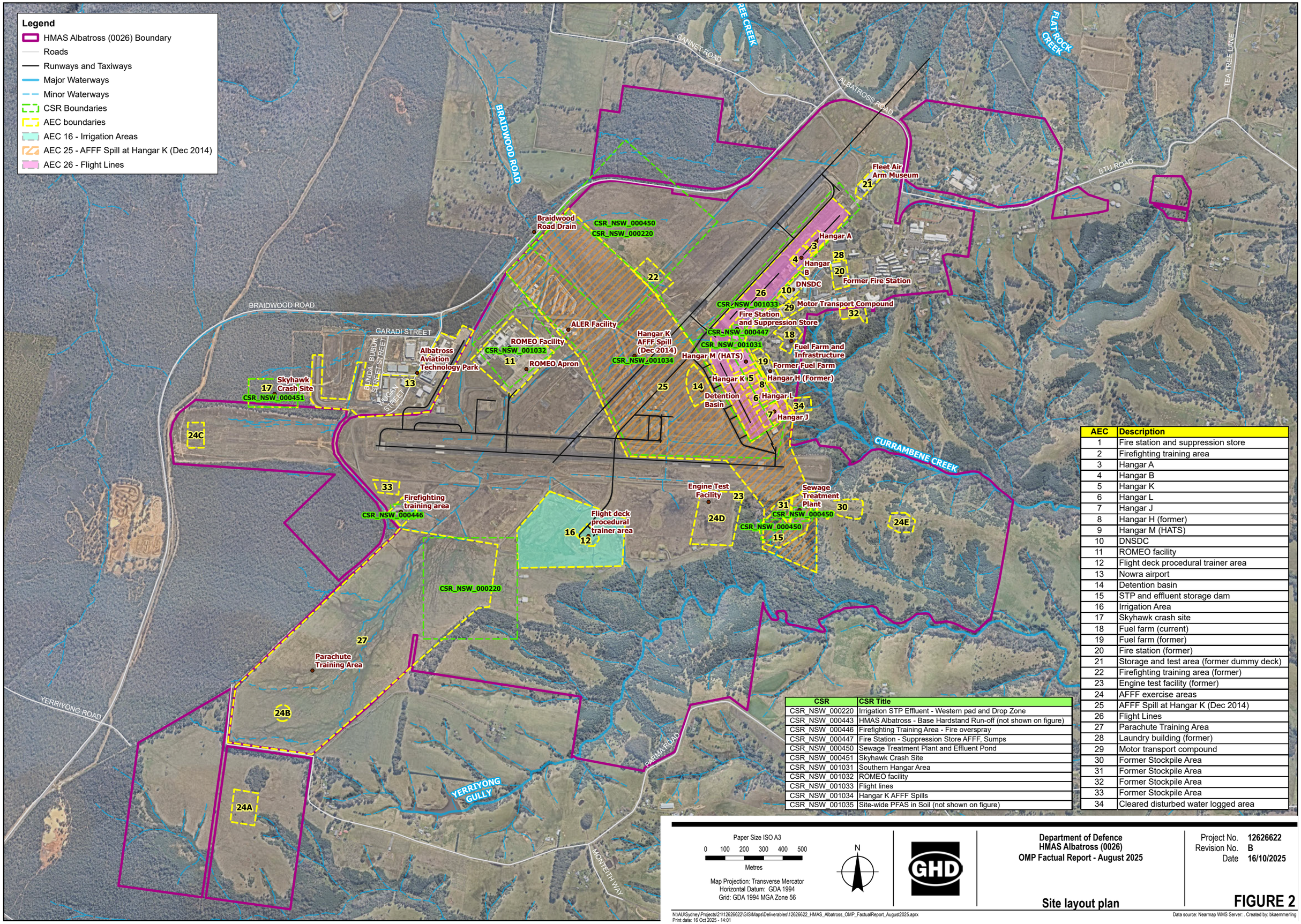

AEC	Description
1	Fire station and suppression store
2	Firefighting training area
3	Hangar A
4	Hangar B
5	Hangar K
6	Hangar L
7	Hangar J
8	Hangar H (former)
9	Hangar M (HATS)
10	DNSDC
11	ROMEO facility
12	Flight deck procedural trainer area
13	Nowra airport
14	Detention basin
15	STP and effluent storage dam
16	Irrigation Area
17	Skyhawk crash site
18	Fuel farm (current)
19	Fuel farm (former)
20	Fire station (former)
21	Storage and test area (former dummy deck)
22	Firefighting training area (former)
23	Engine test facility (former)
24	AFFF exercise areas
25	AFFF Spill at Hangar K (Dec 2014)
26	Flight Lines
27	Parachute Training Area
28	Laundry building (former)
29	Motor transport compound
30	Former Stockpile Area
31	Former Stockpile Area
32	Former Stockpile Area
33	Former Stockpile Area
34	Cleared disturbed water logged area

CSR	CSR Title
CSR_NSW_000220	Irrigation STP Effluent - Western pad and Drop Zone
CSR_NSW_000443	HMAS Albatross - Base Hardstand Run-off (not shown on figure)
CSR_NSW_000446	Firefighting Training Area - Fire overspray
CSR_NSW_000447	Fire Station - Suppression Store AFFF, Sumps
CSR_NSW_000450	Sewage Treatment Plant and Effluent Pond
CSR_NSW_000451	Skyhawk Crash Site
CSR_NSW_001031	Southern Hangar Area
CSR_NSW_001032	ROMEO facility
CSR_NSW_001033	Flight lines
CSR_NSW_001034	Hangar K AFFF Spills
CSR_NSW_001035	Site-wide PFAS in Soil (not shown on figure)

Paper Size ISO A3

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Metres

Map Projection: Transverse Mercator
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Grid: GDA 1994 MGA Zone 56

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Site layout plan

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FIGURE 2

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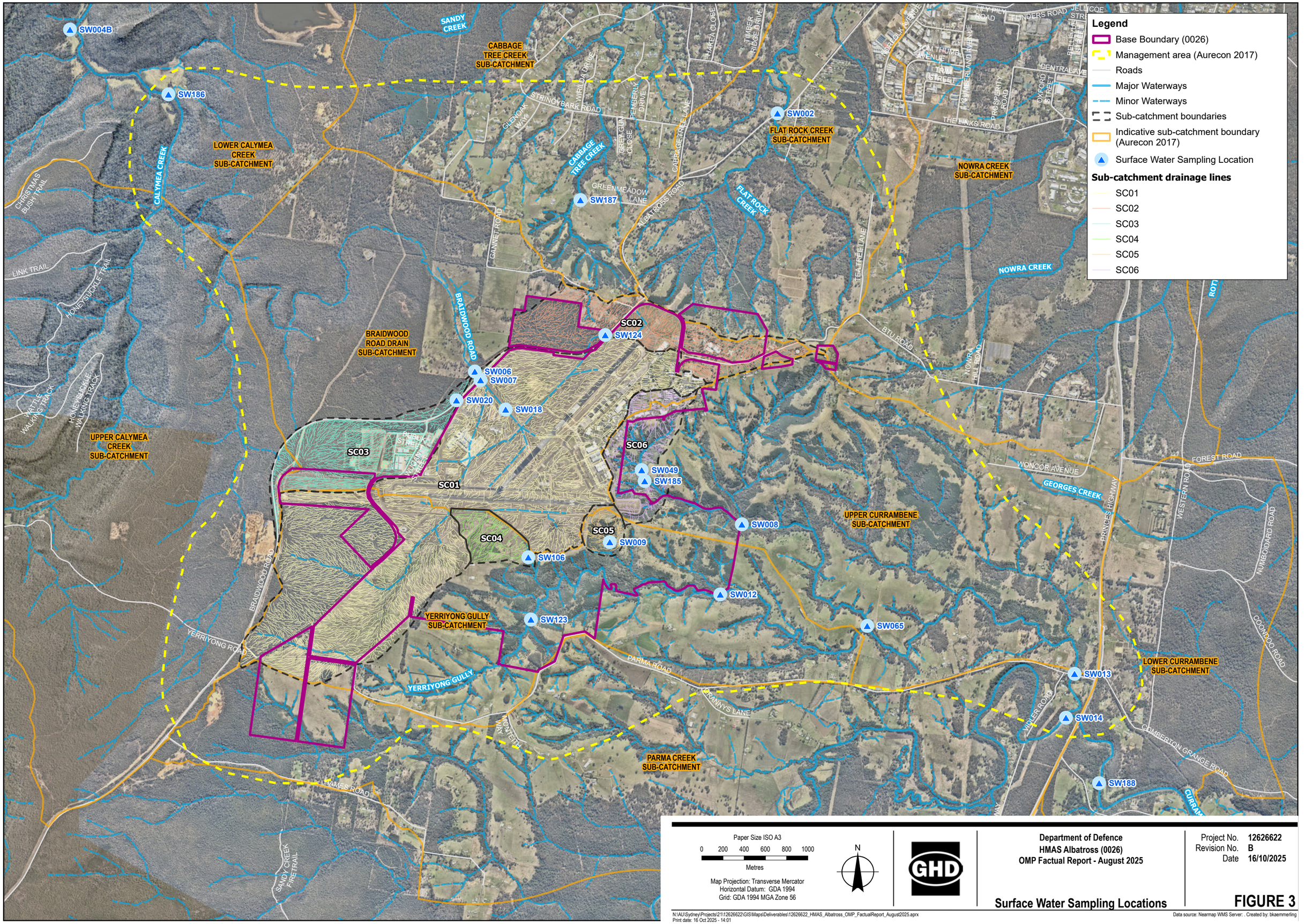

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Surface Water Sampling Locations

FIGURE 3

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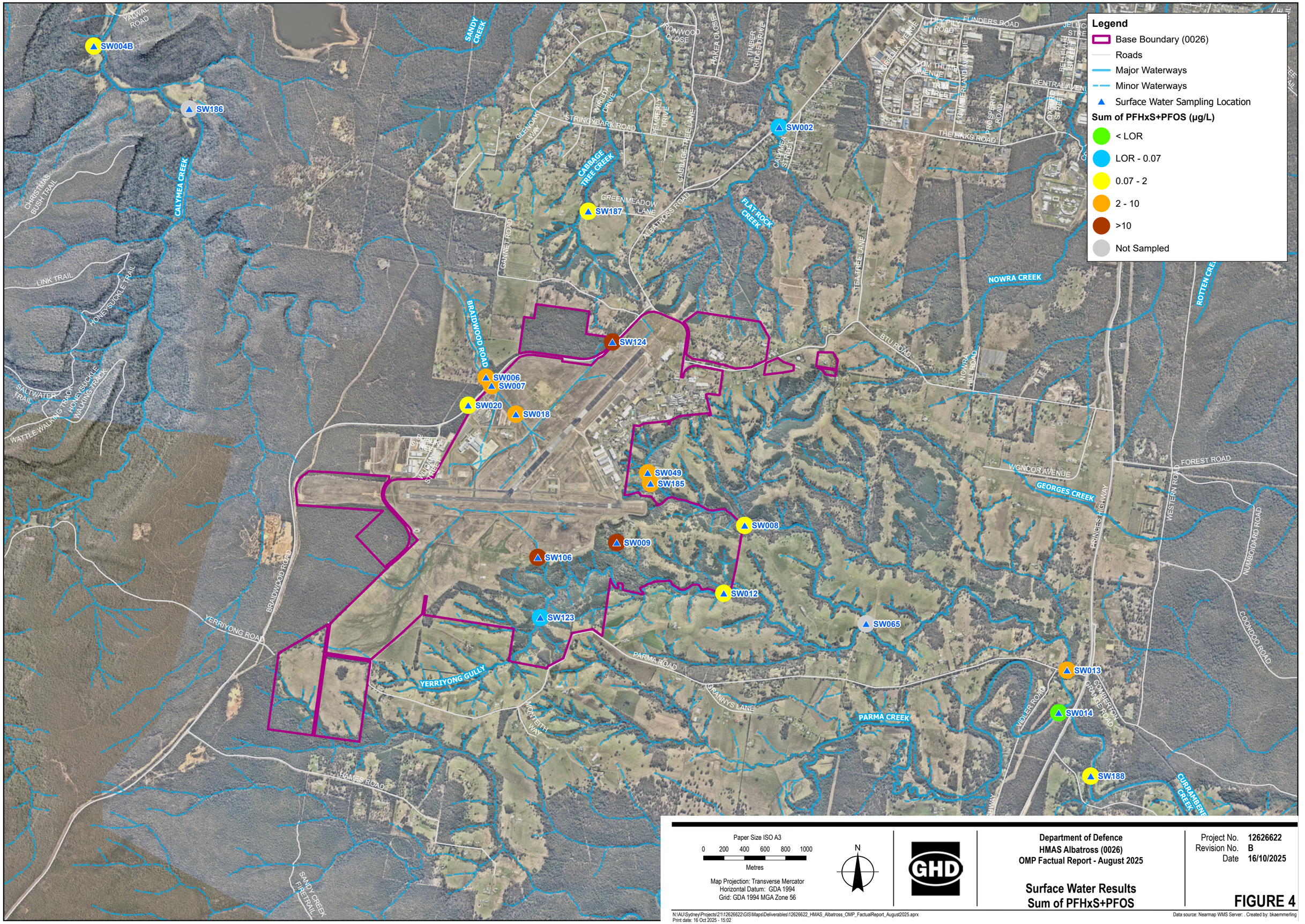

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Grid: GDA 1994 MGA Zone 56

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Surface Water Results Sum of PFHxS+PFOS

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FIGURE 4

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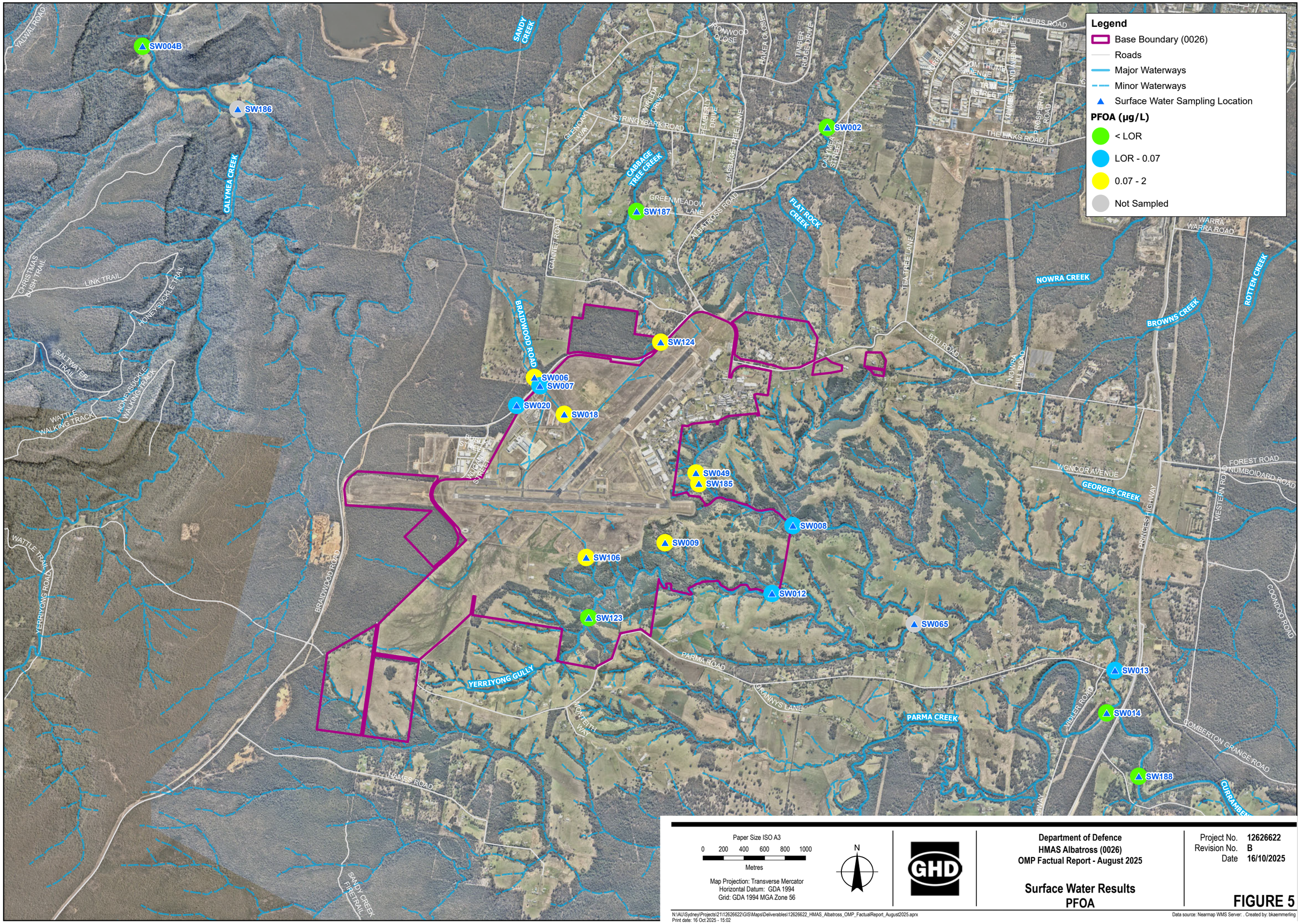

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Surface Water Results
PFOA

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FIGURE 5

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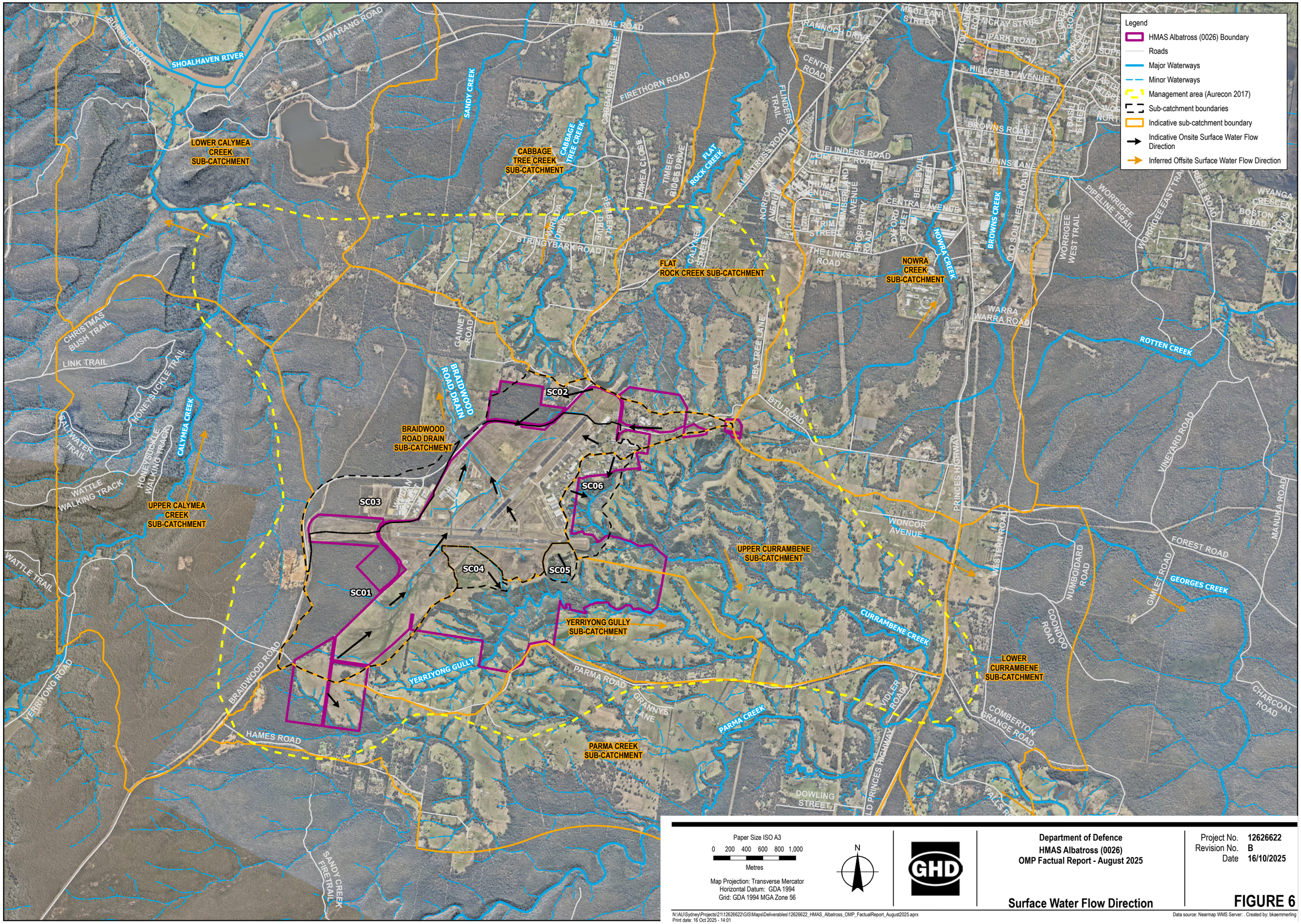
Legend
HMAS Albatross (0026) Boundary
Roads
Major Waterways
Minor Waterways
Management area (Aurecon 2017)
Sub-catchment boundaries
Indicative sub-catchment boundary
Indicative Onsite Surface Water Flow Direction
Inferred Offsite Surface Water Flow Direction
LOWER CALYMEA CREEK SUB-CATCHMENT
CABBAGE TREE CREEK SUB-CATCHMENT
FLAT ROCK CREEK SUB-CATCHMENT
NOWRA CREEK SUB-CATCHMENT
BRAIDWOOD ROAD DRAIN SUB-CATCHMENT
UPPER CALYMEA CREEK SUB-CATCHMENT
YERRIYONG GULLY SUB-CATCHMENT
UPPER CURRAMBENE SUB-CATCHMENT
LOWER CURRAMBENE SUB-CATCHMENT
PARMA CREEK SUB-CATCHMENT
SC01
SC02
SC03
SC04
SC05
SC06
SHOALHAVEN RIVER
SANDY CREEK
CABBAGE TREE CREEK
FLAT ROCK CREEK
NOWRA CREEK
BROWNS CREEK
ROTTEN CREEK
CALYMEA CREEK
BRAIDWOOD ROAD DRAIN
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QUINNS LANE
OLD SOUTHERN ROAD
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HONEYSUCKLE TRAIL
SALTWATER TRAIL
WATTLE WALKING TRACK
WATTLE TRAIL
YERRIYONG ROAD
BRAIDWOOD ROAD
HAMES ROAD
PARMA ROAD
GRANNYS LANE
WONCOR AVENUE
PRINCES HIGHWAY
WESTERN ROAD
NUMBOIDARD ROAD
COONDOO ROAD
FOREST ROAD
GIMLET ROAD
MANUKA ROAD
VINEYARD ROAD
VIDLER ROAD
COMBERTON GRANGE ROAD
CHARCOAL ROAD
DOWLING STREET
SANDY CREEK FIRE TRAIL
Paper Size ISO A3
0 200 400 600 800 1,000
Metres
Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56
N
GHD
Department of Defence
HMAS Albatross (0026)
OMP Factual Report - August 2025
Surface Water Flow Direction
Project No. 12626622
Revision No. B
Date 16/10/2025
FIGURE 6
N:\AU\Sydney\Projects\21\12626622\GIS\Maps\Deliverables\12626622_HMAS_Albatross_OMP_FactualReport_August2025.aprx
Print date: 16 Oct 2025 - 14:01
Data source: Nearmap WMS Server: . Created by: bkaemmerling

Appendix B

Results tables

			Field Parameters						
			pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field)	DO (%S) (Field)	Redox (Field)	Temperature (Field)	TDS (Field)
			pH units	µS/cm	mg/L	%S	mV	˚C	mg/L
EQL			0.01	0.1	0.01	0.01	0.01	0.1	10
Location Code	**Field ID**	**Date**							
0026_SW185	0026_SW185_250828	28 Aug 2025	7.32	625	9.34	85.6	111.8	11.8	546
0026_SW187	0026_SW187_250828	28 Aug 2025	6.98	149	8.52	81.1	109	13.4	124.8
0026_SW188	0026_SW188_250828	28 Aug 2025	6.54	164.5	10.27	98.7	106	13.5	137.15
SW002	0026_SW002_250828	28 Aug 2025	6.56	422.2	8.64	77	110.1	12.2	363.35
SW004B	0026_SW004B	29 Aug 2025	6.59	61.3	10.14	109.38	119.9	11.8	53.3
SW005	0026_SW005_250828	28 Aug 2025	6.98	289.6	9.58	92.2	101	13.9	239.2
SW006	0026_SW006_250828	28 Aug 2025	7.48	406.6	12.26	110	92.5	13.5	336.7
SW007	0026_SW007_250828	28 Aug 2025	6.5	283.5	5.82	52.2	49.6	10.9	252.2
SW008	0026_SW008_250828	28 Aug 2025	7.5	341.2	8.85	81.7	101	12.1	294.45
SW009	0026_SW009_250828	28 Aug 2025	7.27	388	9.31	87.9	108.6	12.7	330.85
SW012	0026_SW012_250828	28 Aug 2025	7.6	223.7	13.32	112.6	95	11.8	191.75
SW013	0026_SW013_250828	28 Aug 2025	7.44	336.3	8.4	80.3	106	13.8	278.2
SW014	0026_SW014_250828	28 Aug 2025	6.52	141.6	10.52	99.6	88.9	13.4	118.3
SW018	0026_SW018_250828	28 Aug 2025	6.73	252.1	9.98	87.8	135.5	9.4	232.05
SW020	0026_SW020_250828	28 Aug 2025	7.07	172.2	8.86	83.1	102.4	12.4	147.55
SW049	0026_SW049_250828	28 Aug 2025	7.39	649	33.5	312.9	109.5	12.1	559
SW106	0026_SW106_250828	28 Aug 2025	7.56	342.2	9.93	88.7	106	10.6	306.8
SW123	0026_SW123_250828	28 Aug 2025	6.72	196.1	9.43	86.2	116.9	12	169.65
SW124	0026_SW124_250828	28 Aug 2025	7.78	989	11.69	114.3	100.2	14	812.5
Statistics									
Number of Results			19	19	19	19	19	19	19
Number of Detects			19	19	19	19	19	19	19
Minimum Concentration			6.5	61.3	5.82	52.2	49.6	9.4	53.3
Minimum Detect			6.5	61.3	5.82	52.2	49.6	9.4	53.3
Maximum Concentration			7.78	989	33.5	312.9	135.5	14	812.5
Maximum Detect			7.78	989	33.5	312.9	135.5	14	812.5
Average Concentration *			7.1	339	11	102	104	12	289
Geometric Average *			7.1	282	10	95	102	12	241
Median Concentration *			7.07	289.6	9.58	87.9	106	12.2	252.2
Standard Deviation *			0.43	220	5.7	53	17	1.2	184
Geometric Standard Deviation *			1.1	1.9	1.4	1.4	1.2	1.1	1.9
95% UCL (Student's-t) *			7.253	426.1	13.23	123.3	110.3	12.87	362.3
Number of Env Standard Exceedances			0	0	0	0	0	0	0
Number of Env Standard Exceedances (Detects Only)			0	0	0	0	0	0	0
% of Detects			100	100	100	100	100	100	100
% of Non-Detects			0	0	0	0	0	0	0
% of Detects at or above Env Standards			0	0	0	0	0	0	0
% of Results Below Env Standards or Non-Detect			100	100	100	100	100	100	100

* A Non Detect Multiplier of 0.5 has been applied.

					PFAS - Perfluoroalkyl Sulfonic Acids								PFAS - Perfluoroalkyl Carboxylic Acids												
					Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluorooctanoic acid (PFOA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnDA)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL					0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.05	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.05	0.02
PFAS NEMP 3.0 2025 Freshwater 99%									0.00023										19						
PFAS NEMP 3.0 2025 Recreational water quality									2			2							10						
Location Code	**Field ID**	**Date**	**Sample Type**	**Lab Report Number**																					
0026_SW185	0026_SW185_250828	28 Aug 2025	Normal	ES2527020	0.16	<0.02	-	0.05	1.16	-	0.21	1.50	<0.1	<0.02	<0.02	0.04	0.32	<0.02	0.08	0.04	<0.05	<0.02	<0.02	<0.05	<0.02
0026_SW187	0026_SW187_250828	28 Aug 2025	Normal	ES2527020	<0.02	<0.02	-	<0.02	0.16	-	<0.02	0.09	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.05	<0.02	<0.02	<0.05	<0.02
0026_SW188	0026_SW188_250828	28 Aug 2025	Normal	ES2527020	<0.02	<0.02	-	<0.02	0.10	-	<0.02	0.06	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.05	<0.02	<0.02	<0.05	<0.02
SW002	0026_SW002_250828	28 Aug 2025	Normal	ES2527020	<0.02	<0.02	-	<0.02	0.01	-	<0.02	0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.05	<0.02	<0.02	<0.05	<0.02
SW004B	0026_SW004B_250828	28 Aug 2025	Normal	ES2527020	<0.02	<0.02	-	<0.02	0.13	-	<0.02	0.09	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.01	<0.02	<0.05	<0.02	<0.02	<0.05	<0.02
SW005	0026_SW005_250828	28 Aug 2025	Normal	ES2527020	0.15	<0.02	-	0.07	1.77	-	0.17	1.46	<0.1	<0.02	<0.02	0.05	0.33	<0.02	0.11	0.07	<0.05	<0.02	<0.02	<0.05	<0.02
SW006	0026_SW006_250828	28 Aug 2025	Normal	ES2527020	0.33	<0.02	-	0.17	3.84	-	0.35	3.19	<0.1	<0.02	<0.02	0.12	0.78	<0.02	0.24	0.14	<0.05	<0.02	<0.02	<0.05	<0.02
SW007	0026_QC100_250828	28 Aug 2025	Field_D	ES2527020	<0.02	<0.02	-	0.03	0.71	-	0.13	0.82	<0.1	<0.02	<0.02	0.03	0.26	<0.02	0.05	<0.02	<0.05	<0.02	<0.02	<0.05	<0.02
	0026_QC200_250828	28 Aug 2025	Interlab_D	1263091	0.16[#1]	0.01[#1]	0.01[#1]	0.04[#1]	1.3[#1]	0.05	0.12[#1]	0.97[#1]	<0.05	<0.01	<0.01	0.04[#1]	0.25	<0.01	0.06[#1]	0.06	<0.01	<0.01	<0.01	<0.05	<0.05
	0026_SW007_250828	28 Aug 2025	Normal	ES2527020	0.14	<0.02	-	0.04	0.74	-	0.13	0.77	<0.1	<0.02	<0.02	0.04	0.26	<0.02	0.06	0.06	<0.05	<0.02	<0.02	<0.05	<0.02
SW008	0026_SW008_250828	28 Aug 2025	Normal	ES2527020	0.05	<0.02	-	0.02	0.71	-	0.06	0.52	<0.1	<0.02	<0.02	<0.02	0.11	<0.02	0.03	<0.02	<0.05	<0.02	<0.02	<0.05	<0.02
SW009	0026_SW009_250828	28 Aug 2025	Normal	ES2527020	0.19	<0.02	-	0.20	7.45	-	0.25	3.34	<0.1	<0.02	<0.02	0.07	0.59	<0.02	0.19	0.11	<0.05	<0.02	<0.02	<0.05	<0.02
SW012	0026_SW012_250828	28 Aug 2025	Normal	ES2527020	0.06	<0.02	-	0.03	0.85	-	0.07	0.71	<0.1	<0.02	<0.02	<0.02	0.10	<0.02	0.03	0.02	<0.05	<0.02	<0.02	<0.05	<0.02
SW013	0026_SW013_250828	28 Aug 2025	Normal	ES2527020	0.06	<0.02	-	0.03	1.48	-	0.08	0.80	<0.1	<0.02	<0.02	<0.02	0.13	<0.02	0.04	0.02	<0.05	<0.02	<0.02	<0.05	<0.02
SW014	0026_SW014_250828	28 Aug 2025	Normal	ES2527020	<0.02	<0.02	-	<0.02	<0.01	-	<0.02	<0.01	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.05	<0.02	<0.02	<0.05	<0.02
SW018	0026_SW018_250828	28 Aug 2025	Normal	ES2527020	0.15	<0.02	-	0.07	1.82	-	0.16	1.58	<0.1	<0.02	<0.02	0.05	0.32	<0.02	0.11	0.08	<0.05	<0.02	<0.02	<0.05	<0.02
SW020	0026_SW020_250828	28 Aug 2025	Normal	ES2527020	0.06	<0.02	-	0.02	0.66	-	0.08	0.76	<0.1	<0.02	<0.02	<0.02	0.10	<0.02	0.02	0.02	<0.05	<0.02	<0.02	<0.05	<0.02
SW049	0026_SW049_250828	28 Aug 2025	Normal	ES2527020	0.14	<0.02	-	0.06	1.45	-	0.22	1.50	<0.1	<0.02	<0.02	0.04	0.30	<0.02	0.08	0.04	<0.05	<0.02	<0.02	<0.05	<0.02
SW106	0026_SW106_250828	28 Aug 2025	Normal	ES2527020	0.34	<0.02	-	0.24	11.4	-	0.41	3.89	<0.1	<0.02	<0.02	0.10	0.70	<0.02	0.24	0.15	<0.05	<0.02	<0.02	<0.05	<0.02
SW123	0026_SW123_250828	28 Aug 2025	Normal	ES2527020	<0.02	<0.02	-	<0.02	0.01	-	<0.02	0.03	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.05	<0.02	<0.02	<0.05	<0.02
SW124	0026_QC101_250828	28 Aug 2025	Field_D	ES2527020	1.20	<0.02	-	0.30	6.04	-	1.77	9.20	0.1	<0.02	<0.02	0.25	2.25	<0.02	0.43	0.32	<0.05	<0.02	<0.02	<0.05	<0.02
	0026_QC201_250828	28 Aug 2025	Interlab_D	1263091	1.4[#1]	<0.01	0.02[#1]	0.40[#1]	8.6[#1]	0.43	1.6[#1]	10[#1]	0.13	<0.01	<0.01	0.30[#1]	1.9	<0.01	0.40[#1]	0.24	<0.01	<0.01	<0.01	<0.05	<0.05
	0026_SW124_250828	28 Aug 2025	Normal	ES2527020	1.16	<0.02	-	0.26	4.68	-	1.54	9.01	0.1	<0.02	<0.02	0.22	2.23	<0.02	0.42	0.28	<0.05	<0.02	<0.02	<0.05	<0.02
Statistics																									
Number of Results					23	23	2	23	23	2	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
Number of Detects					16	1	2	17	22	2	17	22	3	0	0	13	18	0	17	15	0	0	0	0	0
Minimum Concentration					<0.02	0.01	0.01	0.02	0.01	0.05	<0.02	<0.01	<0.05	<0.01	<0.01	<0.02	0.02	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.05	<0.02
Minimum Detect					0.05	0.01	0.01	0.02	0.01	0.05	0.06	0.02	0.1	ND	ND	0.03	0.02	ND	0.02	0.02	ND	ND	ND	ND	ND
Maximum Concentration					1.4	<0.02	0.02	0.4	11.4	0.43	1.77	10	0.13	<0.02	<0.02	0.3	2.25	<0.02	0.43	0.32	<0.05	<0.02	<0.02	<0.05	<0.05
Maximum Detect					1.4	0.01	0.02	0.4	11.4	0.43	1.77	10	0.13	ND	ND	0.3	2.25	ND	0.43	0.32	ND	ND	ND	ND	ND
Average Concentration *					0.25	0.0098	0.015	0.091	2.4	0.24	0.32	2.2	0.057	0.0096	0.0096	0.063	0.48	0.0096	0.11	0.075	0.023	0.0096	0.0096	0.025	0.011
Geometric Average *					0.079	0.0097	0.014	0.044	0.69	0.15	0.1	0.64	0.054	0.0094	0.0094	0.031	0.15	0.0094	0.045	0.037	0.022	0.0094	0.0094	0.025	0.011
Median Concentration *					0.14	0.01	0.015	0.04	1.16	0.24	0.13	0.82	0.05	0.01	0.01	0.04	0.26	0.01	0.06	0.04	0.025	0.01	0.01	0.025	0.01
Standard Deviation *					0.41	0.001	0.0071	0.11	3.1	0.27	0.53	3.1	0.022	0.0014	0.0014	0.083	0.69	0.0014	0.14	0.092	0.0058	0.0014	0.0014	0	0.0043
Geometric Standard Deviation *					5.3	1.2	1.6	3.5	8.8	4.6	5.4	7.7	1.4	1.2	1.2	3.3	6.1	1.2	4.9	3.4	1.6	1.2	1.2	1	1.3
95% UCL (Student's-t) *					0.4	0.0102	0.0466	0.131	3.52	1.44	0.513	3.282	0.0647	0.0101	0.0101	0.0928	0.725	0.0101	0.164	0.108	0.0253	0.0101	0.0101	0.025	0.0129
Number of Env Standard Exceedances					0	0	0	0	23	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Env Standard Exceedances (Detects Only)					0	0	0	0	22	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Detects					70	4	100	74	96	100	74	96	13	0	0	57	78	0	74	65	0	0	0	0	0
% of Non-Detects					30	96	0	26	4	0	26	4	87	100	100	43	22	100	26	35	100	100	100	100	100
% of Detects at or above Env Standards					0	0	0	0	96	0	0	26	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Results Below Env Standards or Non-Detect					100	100	100	100	4	100	100	74	100	100	100	100	100	100	100	100	100	100	100	100	100

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Quantification of linear and branched isomers has been conducted as a single total response using the relative response factor for the corresponding linear/branched standard.

Environmental Standards

HEPA, March 2025, PFAS NEMP 3.0 2025 Freshwater 99%
HEPA, March 2025, PFAS NEMP 3.0 2025 Recreational water quality

						PFAS - Perfluoroalkyl Sulfonamide					PFAS - Fluorotelomer Sulfonic Acids				PFAS - Sums		
						N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (PFOSA)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	PFAS (Sum of Total)	PFAS (Sum of Total)\WA DER List)	Sum of PFHxS and PFOS
						µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL						0.05	0.05	0.02	0.05	0.02	0.01	0.05	0.01	0.01	0.01	0.01	0.01
PFAS NEMP 3.0 2025 Freshwater 99%																	
PFAS NEMP 3.0 2025 Recreational water quality																	2
Location Code	**Field ID**	**Date**	**Sample Type**	**Lab Report Number**													
0026_SW185	0026_SW185_250828	28 Aug 2025	Normal	ES2527020		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	3.62	3.30	2.66
0026_SW187	0026_SW187_250828	28 Aug 2025	Normal	ES2527020		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	0.25	0.25	0.25
0026_SW188	0026_SW188_250828	28 Aug 2025	Normal	ES2527020		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	0.16	0.16	0.16
SW002	0026_SW002_250828	28 Aug 2025	Normal	ES2527020		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	0.03	0.03	0.03
SW004B	0026_SW004B_250828	28 Aug 2025	Normal	ES2527020		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	0.24	0.24	0.22
SW005	0026_SW005_250828	28 Aug 2025	Normal	ES2527020		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	4.25	3.94	3.23
SW006	0026_SW006_250828	28 Aug 2025	Normal	ES2527020		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	9.30	8.64	7.03
SW007	0026_QC100_250828	28 Aug 2025	Field_D	ES2527020		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	2.06	1.87	1.53
	0026_QC200_250828	28 Aug 2025	Interlab_D	1263091		<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01	3.1	2.84	2.27
	0026_SW007_250828	28 Aug 2025	Normal	ES2527020		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	2.28	2.07	1.51
SW008	0026_SW008_250828	28 Aug 2025	Normal	ES2527020		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	1.50	1.42	1.23
SW009	0026_SW009_250828	28 Aug 2025	Normal	ES2527020		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	12.5	11.9	10.8
SW012	0026_SW012_250828	28 Aug 2025	Normal	ES2527020		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	1.90	1.77	1.56
SW013	0026_SW013_250828	28 Aug 2025	Normal	ES2527020		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	2.66	2.53	2.28
SW014	0026_SW014_250828	28 Aug 2025	Normal	ES2527020		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.01
SW018	0026_SW018_250828	28 Aug 2025	Normal	ES2527020		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	4.41	4.11	3.40
SW020	0026_SW020_250828	28 Aug 2025	Normal	ES2527020		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	1.74	1.62	1.42
SW049	0026_SW049_250828	28 Aug 2025	Normal	ES2527020		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	3.89	3.55	2.95
SW106	0026_SW106_250828	28 Aug 2025	Normal	ES2527020		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	17.7	16.8	15.3
SW123	0026_SW123_250828	28 Aug 2025	Normal	ES2527020		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	0.04	0.04	0.04
SW124	0026_QC101_250828	28 Aug 2025	Field_D	ES2527020		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	22.3	19.8	15.2
	0026_QC201_250828	28 Aug 2025	Interlab_D	1263091		<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01	25	22.97	18.6
	0026_SW124_250828	28 Aug 2025	Normal	ES2527020		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	20.4	18.1	13.7

Statistics

Number of Results	23	23	23	23	23	23	23	23	23	23	23	23	23
Number of Detects	0	0	0	0	0	0	0	0	0	22	22	22	22
Minimum Concentration	<0.05	<0.05	<0.02	<0.05	<0.02	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.03	0.03	0.03	0.03
Maximum Concentration	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	25	22.97	18.6	18.6
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	25	22.97	18.6	18.6
Average Concentration *	0.025	0.025	0.011	0.025	0.011	0.023	0.025	0.023	0.023	6.1	5.6	4.6	4.6
Geometric Average *	0.025	0.025	0.011	0.025	0.011	0.022	0.025	0.022	0.022	1.6	1.5	1.3	1.3
Median Concentration *	0.025	0.025	0.01	0.025	0.01	0.025	0.025	0.025	0.025	2.66	2.53	2.27	2.27
Standard Deviation *	0	0	0.0043	0	0.0043	0.0058	0	0.0058	0.0058	7.8	7.1	5.8	5.8
Geometric Standard Deviation *	1	1	1.3	1	1.3	1.6	1	1.6	1.6	9.7	9.4	8.7	8.7
95% UCL (Student's-t) *	0.025	0.025	0.0129	0.025	0.0129	0.0253	0.025	0.0253	0.0253	8.864	8.118	6.659	6.659
Number of Env Standard Exceedances	0	0	0	0	0	0	0	0	0	0	0	12	12
Number of Env Standard Exceedances (Detects Only)	0	0	0	0	0	0	0	0	0	0	0	12	12
% of Detects	0	0	0	0	0	0	0	0	0	96	96	96	96
% of Non-Detects	100	100	100	100	100	100	100	100	100	4	4	4	4
% of Detects at or above Env Standards	0	0	0	0	0	0	0	0	0	0	0	52	52
% of Results Below Env Standards or Non-Detect	100	100	100	100	100	100	100	100	100	100	100	48	48

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Quantification of linear and branched isomers has been conducted as a single total response using the relative response factor for the co

Environmental Standards

HEPA, March 2025, PFAS NEMP 3.0 2025 Freshwater 99%
HEPA, March 2025, PFAS NEMP 3.0 2025 Recreational water quality

			PFAS - Unsaturated Fluorotelomer Acids	PFAS - Perfluoroalkyl Sulfonic Acids									PFAS - Perfluoroalkyl Carb						
			FOUEA (2H-Perfluoro-2-decenoic acid (8:2))	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorononanesulfonic acid (PFNS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluorooctanoic acid (PFOA)
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01		0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01
PFAS NEMP 3.0 2025 Freshwater 99%								0.00023											19
PFAS NEMP 3.0 2025 Recreational water quality								2				2							10
Location Code	**Date**	**Sample Type**																	
0026_SW185	04 Jul 2025	Normal	-	0.05	<0.02	-	0.02	0.60	-	0.06	-	0.45	<0.1	<0.02	<0.02	<0.02	0.09	<0.02	0.03
	28 Aug 2025	Normal	-	0.16	<0.02	-	0.05	1.16	-	0.21	-	1.50	<0.1	<0.02	<0.02	0.04	0.32	<0.02	0.08
0026_SW187	28 Aug 2025	Normal	-	<0.02	<0.02	-	<0.02	0.16	-	<0.02	-	0.09	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
0026_SW188	28 Aug 2025	Normal	-	<0.02	<0.02	-	<0.02	0.10	-	<0.02	-	0.06	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
SW002	15 Nov 2016	Normal	-	<0.01	<0.01	-	-	0.03[#1]	-	-	-	0.01[#1]	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
		Field_D	-	<0.01	<0.01	-	-	0.03[#1]	-	-	-	0.01[#1]	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
			-	<0.01	<0.01	-	-	0.03[#1]	-	-	-	0.01[#1]	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
			-	<0.01	<0.01	-	-	0.03[#1]	-	-	-	0.01[#1]	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	13 Dec 2016	Normal	-	<0.01	<0.01	-	-	0.03[#1]	-	-	-	0.02[#1]	<0.05	<0.01	<0.01	0.01	0.01	0.01	0.04[#1]
	17 Dec 2016	Normal	-	<0.01	<0.01	-	-	0.04[#1]	-	-	-	0.02[#1]	<0.05	<0.01	<0.01	<0.01	0.01	<0.01	<0.01
		Field_D	-	<0.01	<0.01	-	-	0.05[#1]	-	-	-	0.02[#1]	<0.05	<0.01	<0.01	<0.01	0.01	<0.01	<0.01
		Interlab_D	-	<0.02	<0.02	-	<0.02	0.04	-	<0.02	-	0.06	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	0.01
	09 Feb 2017	Normal	-	<0.01	<0.01	-	-	0.03[#1]	-	-	-	0.01[#1]	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
		Field_D	-	<0.01	0.04	-	-	0.03[#1]	-	-	-	0.01[#1]	<0.05	0.01	0.04	<0.01	<0.01	<0.01	<0.01
	31 Mar 2017	Normal	-	<0.01	<0.01	-	<0.01	0.03[#1]	-	<0.01	-	0.05[#1]	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	11 Feb 2020	Normal	-	<0.02	<0.02	-	<0.02	0.02	-	<0.02	-	0.03	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Feb 2020	Normal	-	<0.02	<0.02	-	<0.02	0.08	-	<0.02	-	0.04	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
	20 May 2020	Normal	-	<0.02	<0.02	-	<0.02	0.03	-	<0.02	-	0.03	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Jul 2020	Normal	-	<0.02	<0.02	-	<0.02	0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	27 Aug 2020	Normal	-	<0.02	<0.02	-	<0.02	<0.01	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
		Field_D	-	<0.02	<0.02	-	<0.02	0.10	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
	02 Nov 2020	Normal	-	<0.02	<0.02	-	<0.02	0.01	-	<0.02	-	0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10 Feb 2021	Normal	-	<0.02	<0.02	-	<0.02	0.01	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
		Interlab_D	<0.01	<0.01	<0.01	-	<0.01	<0.02	-	<0.01	<0.01	0.015	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	11 Aug 2021	Normal	-	<0.02	<0.02	-	<0.02	<0.01	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Feb 2022	Normal	-	<0.02	<0.02	-	<0.02	0.02	-	<0.02	-	0.04	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Interlab_D	-	<0.01	<0.02	-	<0.01	0.01	-	<0.01	-	0.03	<0.02	<0.02	<0.05	<0.01	<0.01	<0.01	<0.01
	15 Aug 2022	Normal	-	<0.02	<0.02	-	<0.02	0.01	-	<0.02	-	0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15 Feb 2023	Normal	-	<0.02	<0.02	-	<0.02	0.02	-	<0.02	-	0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Interlab_D	-	<0.01	<0.02	-	<0.01	0.03	-	<0.01	-	0.03	<0.02	<0.02	<0.05	<0.01	<0.01	<0.01	<0.01
	16 Aug 2023	Normal	-	<0.02	<0.02	-	<0.02	0.03	-	<0.02	-	0.06	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Feb 2024	Normal	-	<0.02	<0.02	-	<0.02	0.03	-	<0.02	-	0.04	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
	11 Feb 2025	Normal	-	<0.02	<0.02	-	<0.02	0.02	-	<0.02	-	<0.01	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2025	Normal	-	<0.02	<0.02	-	<0.02	0.01	-	<0.02	-	0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
SW004B	10 Dec 2019	Normal	-	<0.02	<0.02	-	<0.02	0.05	-	<0.02	-	0.08	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.01

			oxylic Acids						PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
			Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluorooctadecanoic acid (PFODA)	Perfluoro-n-hexadecanoic acid (PFHxDA)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (PFOSA)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			0.01	0.01	0.01	0.01	0.05	0.02	0.02	0.01	0.05	0.02	0.01	0.05	0.01	0.01	0.01	0.01	0.01
PFAS NEMP 3.0 2025 Freshwater 99%																			
PFAS NEMP 3.0 2025 Recreational water quality																			
Location Code	**Date**	**Sample Type**																	
0026_SW185	04 Jul 2025	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	28 Aug 2025	Normal	0.04	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
0026_SW187	28 Aug 2025	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
0026_SW188	28 Aug 2025	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
SW002	15 Nov 2016	Normal	<0.01	<0.01	<0.01	<0.01	-	-	<0.05	-	-	<0.05	-	-	<0.05	<0.01	<0.05	<0.01	-
		Field_D	<0.01	<0.01	<0.01	<0.01	-	-	<0.05	-	-	<0.05	-	-	<0.05	<0.01	<0.05	<0.01	-
			<0.01	<0.01	<0.01	<0.01	-	-	<0.05	-	-	<0.05	-	-	<0.05	<0.01	<0.05	<0.01	-
			<0.01	<0.01	<0.01	<0.01	-	-	<0.05	-	-	<0.05	-	-	<0.05	<0.01	<0.05	<0.01	-
	13 Dec 2016	Normal	<0.01	<0.01	<0.01	<0.01	-	-	-	<0.05	-	-	<0.05	-	<0.05	<0.01	<0.05	<0.01	-
	17 Dec 2016	Normal	<0.01	<0.01	<0.01	<0.01	-	-	<0.05	-	-	<0.05	-	-	<0.05	<0.01	<0.05	<0.01	-
		Field_D	<0.01	<0.01	<0.01	<0.01	-	-	<0.05	-	-	<0.05	-	-	<0.05	<0.01	<0.05	<0.01	-
		Interlab_D	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	09 Feb 2017	Normal	<0.01	<0.01	<0.01	<0.01	-	-	-	<0.05	-	-	<0.05	-	<0.05	<0.01	<0.05	<0.01	-
		Field_D	<0.01	<0.01	<0.01	0.05	-	-	-	<0.05	-	-	<0.05	-	<0.05	<0.01	<0.05	<0.01	-
	31 Mar 2017	Normal	<0.01	<0.01	<0.01	<0.01	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
	11 Feb 2020	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Feb 2020	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	20 May 2020	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Jul 2020	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	27 Aug 2020	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		Field_D	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	02 Nov 2020	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10 Feb 2021	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		Interlab_D	<0.02	<0.02	<0.02	<0.01	<0.05	<0.02	<0.02	<0.01	<0.05	<0.02	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01
	11 Aug 2021	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Feb 2022	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Interlab_D	<0.02	<0.5	<0.1	<0.02	-	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
	15 Aug 2022	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15 Feb 2023	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Interlab_D	<0.02	<0.5	<0.1	<0.02	-	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
	16 Aug 2023	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Feb 2024	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	11 Feb 2025	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2025	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
SW004B	10 Dec 2019	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05

			PFAS - Sums					PFAS
			PFAS (Sum of Total)	PFAS (Sum of Total)(WA DER List)	Sum of US EPA PFAS (PFOS + PFOA)*	Sum of PFHxS and PFOS	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	8:2 Polyfluoroalkyl phosphate diester (8:2 diPAP)
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			0.01	0.01	0.01	0.01	0.01	0.02
PFAS NEMP 3.0 2025 Freshwater 99%								
PFAS NEMP 3.0 2025 Recreational water quality						2		
Location Code	**Date**	**Sample Type**						
0026_SW185	04 Jul 2025	Normal	1.30	1.22	-	1.05	-	-
	28 Aug 2025	Normal	3.62	3.30	-	2.66	-	-
0026_SW187	28 Aug 2025	Normal	0.25	0.25	-	0.25	-	-
0026_SW188	28 Aug 2025	Normal	0.16	0.16	-	0.16	-	-
SW002	15 Nov 2016	Normal	-	-	-	0.04	-	-
		Field_D	-	-	-	0.04	-	-
			-	-	-	0.04	-	-
			-	-	-	0.04	-	-
	13 Dec 2016	Normal	-	-	-	0.05	-	-
	17 Dec 2016	Normal	-	-	-	0.06	-	-
		Field_D	-	-	-	0.07	-	-
		Interlab_D	0.11	0.11	-	0.10	-	-
	09 Feb 2017	Normal	-	-	-	0.04	-	-
		Field_D	-	-	-	0.04	-	-
	31 Mar 2017	Normal	-	-	-	0.08	-	-
	11 Feb 2020	Normal	0.05	0.05	-	0.05	-	-
			-	-	-	-	-	-
	26 Feb 2020	Normal	0.12	0.12	-	0.12	-	-
	20 May 2020	Normal	0.06	0.06	-	0.06	-	-
			-	-	-	-	-	-
	14 Jul 2020	Normal	0.02	0.02	-	0.02	-	-
			-	-	-	-	-	-
	27 Aug 2020	Normal	<0.01	<0.01	-	<0.01	-	-
		Field_D	0.10	0.10	-	0.10	-	-
	02 Nov 2020	Normal	0.03	0.03	-	0.03	-	-
			-	-	-	-	-	-
	10 Feb 2021	Normal	0.01	0.01	-	0.01	-	-
		Interlab_D	-	-	-	0.015	-	<0.02
	11 Aug 2021	Normal	<0.01	<0.01	-	<0.01	-	-
			-	-	-	-	-	-
	08 Feb 2022	Normal	0.06	0.06	-	0.06	-	-
			-	-	-	-	-	-
		Interlab_D	0.04	-	0.01	0.04	-	-
	15 Aug 2022	Normal	0.03	0.03	-	0.03	-	-
			-	-	-	-	-	-
	15 Feb 2023	Normal	0.04	0.04	-	0.04	-	-
			-	-	-	-	-	-
		Interlab_D	0.06	-	0.03	0.06	-	-
	16 Aug 2023	Normal	0.09	0.09	-	0.09	-	-
			-	-	-	-	-	-
	13 Feb 2024	Normal	0.07	0.07	-	0.07	-	-
	11 Feb 2025	Normal	0.02	0.02	-	0.02	-	-
			-	-	-	-	-	-
	28 Aug 2025	Normal	0.03	0.03	-	0.03	-	-
SW004B	10 Dec 2019	Normal	0.16	0.16	-	0.13	-	-

			PFAS - Unsaturated Fluorotelomer Acids	PFAS - Perfluoroalkyl Sulfonic Acids									PFAS - Perfluoroalkyl Carb						
			FOUEA (2H-Perfluoro-2-decenoic acid (8:2))	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorononanesulfonic acid (PFNS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluorooctanoic acid (PFOA)
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01		0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01
PFAS NEMP 3.0 2025 Freshwater 99%								0.00023											19
PFAS NEMP 3.0 2025 Recreational water quality								2				2							10
Location Code	**Date**	**Sample Type**																	
	11 Dec 2019	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Feb 2020	Normal	-	0.05	<0.02	-	<0.02	0.38	-	0.04	-	0.31	<0.1	<0.02	<0.02	<0.02	0.09	<0.02	0.02
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Feb 2020	Normal	-	0.03	<0.02	-	<0.02	0.31	-	0.02	-	0.22	<0.1	<0.02	<0.02	<0.02	0.07	<0.02	0.01
	20 May 2020	Normal	-	0.10	<0.02	-	0.02	0.86	-	0.08	-	0.59	<0.1	<0.02	<0.02	0.03	0.16	<0.02	0.03
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Jul 2020	Normal	-	0.06	<0.02	-	<0.02	0.36	-	0.05	-	0.44	<0.1	<0.02	<0.02	0.02	0.12	<0.02	0.02
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	27 Aug 2020	Normal	-	0.02	<0.02	-	<0.02	0.46	-	<0.02	-	0.15	<0.1	<0.02	<0.02	<0.02	0.04	<0.02	<0.01
		Interlab_D	-	0.02	<0.02	-	<0.01	0.30	-	0.02	-	0.14	<0.02	<0.02	<0.05	<0.01	0.03	<0.01	<0.01
	02 Nov 2020	Normal	-	0.06	<0.02	-	<0.02	0.35	-	0.06	-	0.44	<0.1	<0.02	<0.02	<0.02	0.13	<0.02	0.02
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10 Feb 2021	Normal	-	0.04	<0.02	-	<0.02	0.41	-	0.03	-	0.24	<0.1	<0.02	<0.02	<0.02	0.08	<0.02	0.02
	11 Aug 2021	Normal	-	0.02	<0.02	-	<0.02	0.20	-	0.02	-	0.18	<0.1	<0.02	<0.02	<0.02	0.04	<0.02	<0.01
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Interlab_D	<0.01	<0.01	<0.01	-	<0.01	<0.02	-	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	08 Feb 2022	Normal	-	<0.02	<0.02	-	<0.02	0.19	-	<0.02	-	0.14	<0.1	<0.02	<0.02	<0.02	0.04	<0.02	<0.01
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15 Aug 2022	Normal	-	<0.02	<0.02	-	<0.02	0.14	-	<0.02	-	0.11	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.01
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15 Feb 2023	Normal	-	0.02	<0.02	-	<0.02	0.20	-	0.02	-	0.18	<0.1	<0.02	<0.02	<0.02	0.04	<0.02	0.01
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Aug 2023	Normal	-	0.10	<0.02	-	0.03	0.62	-	0.09	-	0.81	<0.1	<0.02	<0.02	0.03	0.18	<0.02	0.04
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Feb 2024	Normal	-	<0.02	<0.02	-	<0.02	0.26	-	0.02	-	0.17	<0.1	<0.02	<0.02	<0.02	0.04	<0.02	<0.01
	11 Feb 2025	Normal	-	0.06	<0.02	-	0.02	0.62	-	0.06	-	0.59	<0.1	<0.02	<0.02	<0.02	0.12	<0.02	0.03
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2025	Normal	-	<0.02	<0.02	-	<0.02	0.13	-	<0.02	-	0.09	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.01
	29 Aug 2025	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SW005	14 Nov 2016	Normal	-	0.30	<0.01	-	-	3.5[#1]	-	-	-	2.3[#1]	0.31	<0.01	<0.01	0.21[#1]	6.8[#1]	0.01	0.20[#1]
	12 Dec 2016	Normal	-	0.15	<0.01	-	-	2.6[#1]	-	-	-	1.3[#1]	0.07	<0.01	<0.01	0.10[#1]	0.59[#1]	<0.01	0.09[#1]
	17 Dec 2016	Normal	-	0.06	<0.01	-	-	0.71[#1]	-	-	-	0.22[#1]	<0.05	<0.01	<0.01	<0.01	0.05[#1]	<0.01	0.01[#1]
	09 Feb 2017	Normal	-	0.15	<0.01	-	-	3.4[#1]	-	-	-	1.1[#1]	0.10	<0.01	<0.01	0.05[#1]	0.54[#1]	<0.01	0.11[#1]
	29 Mar 2017	Normal	-	0.25	<0.01	-	0.09[#1]	3.6[#1]	-	0.2[#1]	-	2.8[#1]	0.14	<0.01	<0.01	0.1[#1]	0.81[#1]	<0.01	0.15
	10 Dec 2019	Normal	-	0.31	<0.02	-	0.08	1.68	-	0.32	-	2.96	0.1	<0.02	<0.02	0.08	0.78	<0.02	0.06
	11 Dec 2019	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Feb 2020	Normal	-	0.15	<0.02	-	0.03	1.64	-	0.12	-	1.02	<0.1	<0.02	<0.02	0.03	0.29	<0.02	0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Feb 2020	Normal	-	0.23	0.05	-	0.07	3.86	-	0.20	-	1.72	<0.1	<0.02	<0.02	0.09	0.56	<0.02	0.11
	20 May 2020	Normal	-	0.45	<0.02	-	0.13	3.65	-	0.40	-	2.88	<0.1	<0.02	<0.02	0.16	0.85	<0.02	0.16
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Jul 2020	Normal	-	0.25	<0.02	-	0.08	1.95	-	0.26	-	2.09	<0.1	<0.02	<0.02	0.10	0.67	<0.02	0.10
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	27 Aug 2020	Normal	-	0.29	<0.02	-	0.10	2.43	-	0.34	-	2.27	<0.1	<0.02	<0.02	0.09	0.64	<0.02	0.13
	02 Nov 2020	Normal	-	0.37	<0.02	-	0.13	4.23	-	0.35	-	2.92	0.1	<0.02	<0.02	0.11	0.81	<0.02	0.17
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

			oxylic Acids						PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
			Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluorooctadecanoic acid (PFODA)	Perfluoro-n-hexadecanoic acid (PFHxDA)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (PFOSA)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			0.01	0.01	0.01	0.01	0.05	0.02	0.02	0.01	0.05	0.02	0.01	0.05	0.01	0.01	0.01	0.01	0.01
PFAS NEMP 3.0 2025 Freshwater 99%																			
PFAS NEMP 3.0 2025 Recreational water quality																			
Location Code	**Date**	**Sample Type**																	
	11 Dec 2019	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Feb 2020	Normal	0.04	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Feb 2020	Normal	0.03	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	20 May 2020	Normal	0.07	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Jul 2020	Normal	0.04	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	27 Aug 2020	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		Interlab_D	<0.02	<0.5	<0.1	<0.02	-	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
	02 Nov 2020	Normal	0.03	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10 Feb 2021	Normal	0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	11 Aug 2021	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Interlab_D	<0.02	<0.02	<0.02	<0.01	<0.05	<0.02	<0.02	<0.01	<0.05	<0.02	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01
	08 Feb 2022	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15 Aug 2022	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15 Feb 2023	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Aug 2023	Normal	0.05	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Feb 2024	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	11 Feb 2025	Normal	0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2025	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	29 Aug 2025	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SW005	14 Nov 2016	Normal	0.89	<0.01	<0.01	<0.01	-	-	<0.05	-	-	<0.05	-	-	<0.05	<0.01	21	0.02	-
	12 Dec 2016	Normal	0.24	<0.01	<0.01	<0.01	-	-	<0.05	-	-	<0.05	-	-	<0.05	<0.01	1.2	<0.01	-
	17 Dec 2016	Normal	<0.01	<0.01	<0.01	<0.01	-	-	<0.05	-	-	<0.05	-	-	<0.05	<0.01	<0.05	<0.01	-
	09 Feb 2017	Normal	0.11[#1]	<0.01	<0.01	<0.01	-	-	-	<0.05	-	-	<0.05	-	<0.05	<0.01	0.17	<0.01	-
	29 Mar 2017	Normal	0.22[#1]	<0.01	<0.01	<0.01	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	0.36	<0.01	<0.01
	10 Dec 2019	Normal	0.22	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	0.09	<0.05	<0.05
	11 Dec 2019	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Feb 2020	Normal	0.12	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Feb 2020	Normal	0.26	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	20 May 2020	Normal	0.31	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Jul 2020	Normal	0.19	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	27 Aug 2020	Normal	0.16	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	02 Nov 2020	Normal	0.18	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

			PFAS - Sums					PFAS
			PFAS (Sum of Total)	PFAS (Sum of Total)(WA DER List)	Sum of US EPA PFAS (PFOS + PFOA)*	Sum of PFHxS and PFOS	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	8:2 Polyfluoroalkyl phosphate diester (8:2 diPAP)
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			0.01	0.01	0.01	0.01	0.01	0.02
PFAS NEMP 3.0 2025 Freshwater 99%								
PFAS NEMP 3.0 2025 Recreational water quality						2		
Location Code	**Date**	**Sample Type**						
	11 Dec 2019	Normal	-	-	-	-	-	-
	11 Feb 2020	Normal	0.93	0.89	-	0.69	-	-
			-	-	-	-	-	-
	26 Feb 2020	Normal	0.69	0.67	-	0.53	-	-
	20 May 2020	Normal	1.94	1.84	-	1.45	-	-
			-	-	-	-	-	-
	14 Jul 2020	Normal	1.11	1.06	-	0.80	-	-
			-	-	-	-	-	-
	27 Aug 2020	Normal	0.67	0.67	-	0.61	-	-
		Interlab_D	0.51	-	0.30	0.44	-	-
	02 Nov 2020	Normal	1.09	1.03	-	0.79	-	-
			-	-	-	-	-	-
	10 Feb 2021	Normal	0.84	0.81	-	0.65	-	-
	11 Aug 2021	Normal	0.46	0.44	-	0.38	-	-
			-	-	-	-	-	-
		Interlab_D	-	-	-	<0.02	-	<0.02
	08 Feb 2022	Normal	0.37	0.37	-	0.33	-	-
			-	-	-	-	-	-
	15 Aug 2022	Normal	0.28	0.28	-	0.25	-	-
			-	-	-	-	-	-
	15 Feb 2023	Normal	0.47	0.45	-	0.38	-	-
			-	-	-	-	-	-
	16 Aug 2023	Normal	1.95	1.83	-	1.43	-	-
			-	-	-	-	-	-
	13 Feb 2024	Normal	0.49	0.47	-	0.43	-	-
	11 Feb 2025	Normal	1.55	1.44	-	1.21	-	-
			-	-	-	-	-	-
	28 Aug 2025	Normal	0.24	0.24	-	0.22	-	-
	29 Aug 2025	Normal	-	-	-	-	-	-
SW005	14 Nov 2016	Normal	-	-	-	5.8	-	-
	12 Dec 2016	Normal	-	-	-	3.9	-	-
	17 Dec 2016	Normal	-	-	-	0.93	-	-
	09 Feb 2017	Normal	-	-	-	4.5	-	-
	29 Mar 2017	Normal	-	-	-	6.4	-	-
	10 Dec 2019	Normal	6.68	6.28	-	4.64	-	-
	11 Dec 2019	Normal	-	-	-	-	-	-
	11 Feb 2020	Normal	3.45	3.30	-	2.66	-	-
			-	-	-	-	-	-
	26 Feb 2020	Normal	7.15	6.83	-	5.58	-	-
	20 May 2020	Normal	8.99	8.46	-	6.53	-	-
			-	-	-	-	-	-
	14 Jul 2020	Normal	5.69	5.35	-	4.04	-	-
			-	-	-	-	-	-
	27 Aug 2020	Normal	6.45	6.01	-	4.70	-	-
	02 Nov 2020	Normal	9.37	8.89	-	7.15	-	-
			-	-	-	-	-	-

			PFAS - Unsaturated Fluorotelomer Acids	PFAS - Perfluoroalkyl Sulfonic Acids									PFAS - Perfluoroalkyl Carb						
			FOUEA (2H-Perfluoro-2-decenoic acid (8:2))	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorononanesulfonic acid (PFNS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluorooctanoic acid (PFOA)
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01		0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01
PFAS NEMP 3.0 2025 Freshwater 99%								0.00023											19
PFAS NEMP 3.0 2025 Recreational water quality								2				2							10
Location Code	**Date**	**Sample Type**																	
	09 Feb 2021	Normal	-	0.32	<0.02	-	0.08	2.84	-	0.24	-	1.65	<0.1	<0.02	<0.02	0.12	0.58	<0.02	0.14
	11 Aug 2021	Normal	-	1.29	0.07	-	0.29	6.36	-	1.40	-	6.52	0.2	<0.02	<0.02	0.38	2.67	<0.02	0.47
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Feb 2022	Normal	-	0.20	<0.02	-	0.08	2.61	-	0.22	-	1.81	<0.1	<0.02	<0.02	0.07	0.55	<0.02	0.13
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15 Aug 2022	Normal	-	0.47	<0.02	-	0.18	4.22	-	0.58	-	3.27	0.1	<0.02	<0.02	0.16	1.02	<0.02	0.28
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15 Feb 2023	Normal	-	0.17	<0.02	-	0.09	1.95	-	0.20	-	1.57	<0.1	<0.02	<0.02	0.05	0.35	<0.02	0.09
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Field_D	-	0.23	<0.02	-	0.09	3.20	-	0.23	-	1.78	<0.1	<0.02	<0.02	0.06	0.36	<0.02	0.12
	16 Aug 2023	Normal	-	0.19	<0.02	-	0.07	1.92	-	0.18	-	1.87	<0.1	<0.02	<0.02	0.06	0.38	<0.02	0.09
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Field_D	-	0.18	<0.02	-	0.07	1.99	-	0.18	-	1.88	<0.1	<0.02	<0.02	0.06	0.37	<0.02	0.09
		Interlab_D	-	0.18	<0.02	-	0.07	1.5	-	0.18	-	1.5	0.04	<0.02	<0.05	0.05	0.32	<0.01	0.07
	13 Feb 2024	Normal	-	0.25	<0.02	-	0.09	2.38	-	0.24	-	1.79	<0.1	<0.02	<0.02	0.06	0.44	<0.02	0.11
	11 Feb 2025	Normal	-	0.14	<0.02	-	0.06	1.90	-	0.13	-	1.45	<0.1	<0.02	<0.02	0.05	0.32	<0.02	0.07
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2025	Normal	-	0.15	<0.02	-	0.07	1.77	-	0.17	-	1.46	<0.1	<0.02	<0.02	0.05	0.33	<0.02	0.11
SW006	02 May 2016	Normal	-	0.15[#2]	<0.01	-	-	0.33[#2]	-	-	-	0.89[#2]	<0.05	<0.01	<0.01	0.04[#2]	0.24[#2]	<0.01	0.05[#2]
		Field_D	-	0.15[#2]	<0.01	-	-	0.22[#2]	-	-	-	0.94[#2]	<0.05	<0.01	<0.01	0.04[#2]	0.24[#2]	<0.01	0.05[#2]
	31 Oct 2016	Normal	-	0.23	<0.01	-	-	2.7[#1]	-	-	-	1.9[#1]	0.15	0.02	<0.01	0.10[#1]	1.4	<0.01	0.10[#1]
	14 Nov 2016	Normal	-	0.16	<0.01	-	-	13[#1]	-	-	-	2.2[#1]	0.05	0.02	<0.01	0.05[#1]	0.45[#1]	<0.01	0.16[#1]
	12 Dec 2016	Normal	-	0.23	<0.01	-	-	3.7[#1]	-	-	-	2.2[#1]	0.10	<0.01	<0.01	0.13[#1]	0.74[#1]	<0.01	0.11[#1]
	16 Dec 2016	Normal	-	0.13	<0.01	-	-	5.0[#1]	-	-	-	1.2[#1]	0.06	<0.01	<0.01	0.04[#1]	0.40[#1]	<0.01	0.10[#1]
	09 Feb 2017	Normal	-	0.28	<0.01	-	-	6.4[#1]	-	-	-	2.0[#1]	0.14	<0.01	<0.01	0.07[#1]	0.92[#1]	<0.01	0.20[#1]
	10 Dec 2019	Normal	-	0.26	<0.02	-	0.08	1.10	-	0.31	-	3.43	<0.1	<0.02	<0.02	0.04	0.41	<0.02	0.04
	11 Dec 2019	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Feb 2020	Normal	-	0.30	<0.02	-	0.08	2.10	-	0.24	-	1.66	<0.1	<0.02	<0.02	0.05	0.47	<0.02	0.09
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Feb 2020	Normal	-	0.28	0.02	-	0.10	5.98	-	0.27	-	2.30	<0.1	<0.02	<0.02	0.08	0.56	<0.02	0.13
	20 May 2020	Normal	-	0.23	<0.02	-	0.13	4.35	-	0.26	-	2.24	<0.1	<0.02	<0.02	0.09	0.44	<0.02	0.10
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Jul 2020	Normal	-	0.15	<0.02	-	0.04	1.53	-	0.16	-	1.32	<0.1	<0.02	<0.02	0.04	0.29	<0.02	0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Aug 2020	Normal	-	0.39	<0.02	-	0.18	4.04	-	0.47	-	3.53	<0.1	<0.02	<0.02	0.10	0.79	<0.02	0.16
	02 Nov 2020	Normal	-	0.45	<0.02	-	0.15	4.19	-	0.45	-	3.57	0.1	<0.02	<0.02	0.14	1.00	<0.02	0.20
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	09 Feb 2021	Normal	-	0.31	0.08	-	0.22	13.0	-	0.27	-	2.30	<0.1	<0.02	<0.02	0.11	0.54	0.02	0.22
	11 Aug 2021	Normal	-	0.36	<0.02	-	0.18	4.87	-	0.45	-	3.48	<0.1	<0.02	<0.02	0.11	0.74	<0.02	0.21
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Field_D	-	0.30	<0.02	-	0.18	5.24	-	0.40	-	3.20	<0.1	<0.02	<0.02	0.10	0.59	<0.02	0.18
	08 Feb 2022	Normal	-	0.20	<0.02	-	0.08	2.48	-	0.21	-	1.95	<0.1	<0.02	<0.02	0.07	0.74	<0.02	0.10
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15 Aug 2022	Normal	-	0.61	0.03	-	0.32	12.2	-	0.83	-	4.73	0.2	<0.02	<0.02	0.22	1.33	0.02	0.43
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Interlab_D	-	0.59	<0.02	-	0.30	12	-	0.58	-	4.3	0.1	<0.02	<0.05	0.22	1.3	0.01	0.42

			boxylic Acids						PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
			Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluorooctadecanoic acid (PFODA)	Perfluoro-n-hexadecanoic acid (PFHxDA)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (PFOSA)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			0.01	0.01	0.01	0.01	0.05	0.02	0.02	0.01	0.05	0.02	0.01	0.05	0.01	0.01	0.01	0.01	0.01
PFAS NEMP 3.0 2025 Freshwater 99%																			
PFAS NEMP 3.0 2025 Recreational water quality																			
Location Code	**Date**	**Sample Type**																	
	09 Feb 2021	Normal	0.13	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	11 Aug 2021	Normal	0.47	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Feb 2022	Normal	0.12	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15 Aug 2022	Normal	0.18	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15 Feb 2023	Normal	0.08	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Field_D	0.11	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	16 Aug 2023	Normal	0.11	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Field_D	0.11	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		Interlab_D	0.1	<0.5	<0.1	<0.02	-	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
	13 Feb 2024	Normal	0.13	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	11 Feb 2025	Normal	0.10	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2025	Normal	0.07	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
SW006	02 May 2016	Normal	0.06[#2]	<0.01	<0.01	<0.01	-	-	<0.05	-	-	<0.05	-	-	<0.05	<0.01	<0.05	0.01	-
		Field_D	0.06[#2]	<0.01	<0.01	<0.01	-	-	<0.05	-	-	<0.05	-	-	<0.05	<0.01	<0.05	<0.01	-
	31 Oct 2016	Normal	0.31	<0.01	<0.01	<0.01	-	-	<0.05	-	-	<0.05	-	-	<0.05	<0.01	12	0.06	-
	14 Nov 2016	Normal	0.10	<0.01	<0.01	<0.01	-	-	<0.05	-	-	<0.05	-	-	<0.05	<0.01	3.1	0.08	-
	12 Dec 2016	Normal	0.33	<0.01	<0.01	<0.01	-	-	<0.05	-	-	<0.05	-	-	<0.05	<0.01	1.2	0.02	-
	16 Dec 2016	Normal	0.07	<0.01	<0.01	<0.01	-	-	<0.05	-	-	<0.05	-	-	<0.05	<0.01	0.80	0.01	-
	09 Feb 2017	Normal	0.13[#1]	<0.01	<0.01	<0.01	-	-	-	<0.05	-	-	<0.05	-	<0.05	<0.01	0.19	<0.01	-
	10 Dec 2019	Normal	0.09	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	11 Dec 2019	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Feb 2020	Normal	0.16	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Feb 2020	Normal	0.18	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	0.06	<0.05	<0.05
	20 May 2020	Normal	0.16	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	0.02	<0.05	0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Jul 2020	Normal	0.06	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Aug 2020	Normal	0.16	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	02 Nov 2020	Normal	0.20	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	09 Feb 2021	Normal	0.08	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	0.02	<0.05	<0.05	<0.05	<0.05
	11 Aug 2021	Normal	0.16	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Field_D	0.11	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	08 Feb 2022	Normal	0.15	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	2.09	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15 Aug 2022	Normal	0.24	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Interlab_D	0.26	<0.5	<0.1	<0.02	-	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	0.01	<0.02	<0.02

			PFAS - Sums					PFAS
			PFAS (Sum of Total)	PFAS (Sum of Total)(WA DER List)	Sum of US EPA PFAS (PFOS + PFOA)*	Sum of PFHxS and PFOS	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	8:2 Polyfluoroalkyl phosphate diester (8:2 diPAP)
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			0.01	0.01	0.01	0.01	0.01	0.02
PFAS NEMP 3.0 2025 Freshwater 99%								
PFAS NEMP 3.0 2025 Recreational water quality						2		
Location Code	**Date**	**Sample Type**						
	09 Feb 2021	Normal	6.10	5.78	-	4.49	-	-
	11 Aug 2021	Normal	20.1	18.4	-	12.9	-	-
			-	-	-	-	-	-
	08 Feb 2022	Normal	5.79	5.49	-	4.42	-	-
			-	-	-	-	-	-
	15 Aug 2022	Normal	10.5	9.70	-	7.49	-	-
			-	-	-	-	-	-
	15 Feb 2023	Normal	4.55	4.26	-	3.52	-	-
			-	-	-	-	-	-
		Field_D	6.18	5.86	-	4.98	-	-
	16 Aug 2023	Normal	4.87	4.62	-	3.79	-	-
			-	-	-	-	-	-
		Field_D	4.93	4.68	-	3.87	-	-
		Interlab_D	4.0	-	1.6	3.0	-	-
	13 Feb 2024	Normal	5.49	5.16	-	4.17	-	-
	11 Feb 2025	Normal	4.28	4.03	-	3.35	-	-
			-	-	-	-	-	-
	28 Aug 2025	Normal	4.25	3.94	-	3.23	-	-
SW006	02 May 2016	Normal	-	-	-	1.22	-	-
		Field_D	-	-	-	1.16	-	-
	31 Oct 2016	Normal	-	-	-	4.6	-	-
	14 Nov 2016	Normal	-	-	-	15.2	-	-
	12 Dec 2016	Normal	-	-	-	5.9	-	-
	16 Dec 2016	Normal	-	-	-	6.2	-	-
	09 Feb 2017	Normal	-	-	-	8.4	-	-
	10 Dec 2019	Normal	5.76	5.37	-	4.53	-	-
	11 Dec 2019	Normal	-	-	-	-	-	-
	11 Feb 2020	Normal	5.15	4.83	-	3.76	-	-
			-	-	-	-	-	-
	26 Feb 2020	Normal	9.96	9.57	-	8.28	-	-
	20 May 2020	Normal	8.07	7.66	-	6.59	-	-
			-	-	-	-	-	-
	14 Jul 2020	Normal	3.64	3.44	-	2.85	-	-
			-	-	-	-	-	-
	26 Aug 2020	Normal	9.82	9.17	-	7.57	-	-
	02 Nov 2020	Normal	10.4	9.85	-	7.76	-	-
			-	-	-	-	-	-
	09 Feb 2021	Normal	17.2	16.6	-	15.3	-	-
	11 Aug 2021	Normal	10.6	9.93	-	8.35	-	-
			-	-	-	-	-	-
		Field_D	10.3	9.72	-	8.44	-	-
	08 Feb 2022	Normal	8.07	7.78	-	4.43	-	-
			-	-	-	-	-	-
	15 Aug 2022	Normal	21.2	20.0	-	16.9	-	-
			-	-	-	-	-	-
		Interlab_D	20	-	13	16	-	-

			PFAS - Unsaturated Fluorotelomer Acids	PFAS - Perfluoroalkyl Sulfonic Acids									PFAS - Perfluoroalkyl Carb						
			FOUEA (2H-Perfluoro-2-decenoic acid (8:2))	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorononanesulfonic acid (PFNS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluorooctanoic acid (PFOA)
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01		0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01
PFAS NEMP 3.0 2025 Freshwater 99%								0.00023											19
PFAS NEMP 3.0 2025 Recreational water quality								2				2							10
Location Code	**Date**	**Sample Type**																	
	14 Feb 2023	Normal	-	0.16	<0.02	-	0.09	2.14	-	0.18	-	1.47	<0.1	<0.02	<0.02	0.04	0.32	<0.02	0.08
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Aug 2023	Normal	-	0.18	<0.02	-	0.08	2.06	-	0.19	-	1.90	<0.1	<0.02	<0.02	0.06	0.37	<0.02	0.09
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Feb 2024	Normal	-	0.17	<0.02	-	0.07	2.53	-	0.18	-	1.31	<0.1	<0.02	<0.02	0.05	0.32	<0.02	0.08
	12 Feb 2025	Normal	-	0.18	<0.02	-	0.08	2.70	-	0.16	-	1.69	<0.1	<0.02	<0.02	0.05	0.40	<0.02	0.10
	13 Feb 2025	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2025	Normal	-	0.33	<0.02	-	0.17	3.84	-	0.35	-	3.19	<0.1	<0.02	<0.02	0.12	0.78	<0.02	0.24
SW007	14 Dec 2016	Normal	-	0.13	<0.01	-	-	3.6[#1]	-	-	-	1.1[#1]	0.30	<0.01	<0.01	0.42	1.8	0.02	0.12[#1]
	16 Dec 2016	Normal	-	0.03	<0.01	-	-	0.59[#1]	-	-	-	0.43[#1]	<0.05	<0.01	<0.01	0.02	0.09[#1]	<0.01	0.02[#1]
	08 Feb 2017	Normal	-	0.08	<0.01	-	-	2.7[#1]	-	-	-	0.67[#1]	<0.05	<0.01	<0.01	0.02[#1]	0.26[#1]	<0.01	0.06[#1]
	11 Feb 2020	Normal	-	0.07	<0.02	-	<0.02	0.36	-	0.05	-	0.36	<0.1	<0.02	<0.02	<0.02	0.09	<0.02	0.02
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Feb 2020	Normal	-	0.11	<0.02	-	0.02	1.11	-	0.08	-	0.62	<0.1	<0.02	<0.02	0.06	0.26	<0.02	0.04
	20 May 2020	Normal	-	0.18	<0.02	-	0.08	1.50	-	0.24	-	1.97	<0.1	<0.02	<0.02	0.02	0.22	<0.02	0.04
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Jul 2020	Normal	-	0.03	<0.02	-	<0.02	0.39	-	0.03	-	0.37	<0.1	<0.02	<0.02	<0.02	0.05	<0.02	0.01
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Aug 2020	Normal	-	0.14	<0.02	-	0.05	0.94	-	0.16	-	1.34	<0.1	<0.02	<0.02	<0.02	0.19	<0.02	0.03
	02 Nov 2020	Normal	-	0.08	<0.02	-	0.03	0.73	-	0.08	-	0.84	<0.1	<0.02	<0.02	<0.02	0.10	<0.02	0.02
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Field_D	-	0.07	<0.02	-	0.02	0.62	-	0.08	-	0.80	<0.1	<0.02	<0.02	<0.02	0.09	<0.02	0.02
	11 Feb 2021	Normal	-	0.03	<0.02	-	<0.02	0.47	-	0.02	-	0.18	<0.1	<0.02	<0.02	0.03	0.10	<0.02	0.01
	11 Aug 2021	Normal	-	0.13	<0.02	-	0.02	0.25	-	0.13	-	0.93	<0.1	<0.02	<0.02	0.03	0.18	<0.02	0.02
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07 Feb 2022	Normal	-	0.04	<0.02	-	<0.02	0.28	-	0.03	-	0.24	<0.1	<0.02	<0.02	0.02	0.12	<0.02	0.01
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15 Aug 2022	Normal	-	0.12	<0.02	-	0.04	1.20	-	0.12	-	0.70	<0.1	<0.02	<0.02	0.04	0.19	<0.02	0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Field_D	-	0.13	<0.02	-	0.03	0.97	-	0.12	-	0.63	<0.1	<0.02	<0.02	0.04	0.19	<0.02	0.05
	13 Feb 2023	Normal	-	0.08	<0.02	-	0.06	0.74	-	0.09	-	0.84	<0.1	<0.02	<0.02	<0.02	0.13	<0.02	0.02
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Aug 2023	Normal	-	0.04	<0.02	-	<0.02	0.32	-	0.03	-	0.32	<0.1	<0.02	<0.02	0.03	0.11	<0.02	0.01
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Feb 2024	Normal	-	0.07	<0.02	-	0.04	1.06	-	0.07	-	0.59	<0.1	<0.02	<0.02	0.02	0.14	<0.02	0.04
	12 Feb 2025	Normal	-	0.05	<0.02	-	0.02	0.62	-	0.04	-	0.46	<0.1	<0.02	<0.02	0.02	0.15	<0.02	0.02
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2025	Normal	-	0.14	<0.02	-	0.04	0.74	-	0.13	-	0.77	<0.1	<0.02	<0.02	0.04	0.26	<0.02	0.06
		Field_D	-	<0.02	<0.02	-	0.03	0.71	-	0.13	-	0.82	<0.1	<0.02	<0.02	0.03	0.26	<0.02	0.05
		Interlab_D	-	0.16[#1]	0.01[#1]	0.01[#1]	0.04[#1]	1.3[#1]	0.05	0.12[#1]	-	0.97[#1]	<0.05	<0.01	<0.01	0.04[#1]	0.25	<0.01	0.06[#1]
SW008	06 May 2016	Normal	-	0.06	<0.01	-	-	0.42[#2]	-	-	-	0.61[#2]	<0.05	<0.01	<0.01	0.03[#2]	0.16[#2]	<0.01	0.04[#2]
	16 Nov 2016	Normal	-	0.07	<0.01	-	-	2.0[#1]	-	-	-	0.68[#1]	<0.05	<0.01	<0.01	0.02[#1]	0.22[#1]	<0.01	0.04[#1]
	14 Dec 2016	Normal	-	0.16	<0.01	-	-	2.8[#1]	-	-	-	1.5[#1]	0.06	<0.01	<0.01	0.04[#1]	0.42[#1]	<0.01	0.06[#1]
	17 Dec 2016	Normal	-	0.05	<0.01	-	-	2.0[#1]	-	-	-	0.56[#1]	<0.05	<0.01	<0.01	0.01[#1]	0.14[#1]	<0.01	0.03[#1]
	09 Feb 2017	Normal	-	0.05	<0.01	-	-	1.6[#1]	-	-	-	0.52[#1]	<0.05	<0.01	<0.01	0.01[#1]	0.15[#1]	<0.01	0.04[#1]

			oxylic Acids						PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
			Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluorooctadecanoic acid (PFODA)	Perfluoro-n-hexadecanoic acid (PFHxDA)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (PFOSA)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			0.01	0.01	0.01	0.01	0.05	0.02	0.02	0.01	0.05	0.02	0.01	0.05	0.01	0.01	0.01	0.01	0.01
PFAS NEMP 3.0 2025 Freshwater 99%																			
PFAS NEMP 3.0 2025 Recreational water quality																			
Location Code	**Date**	**Sample Type**																	
	14 Feb 2023	Normal	0.08	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Aug 2023	Normal	0.10	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Feb 2024	Normal	0.09	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	12 Feb 2025	Normal	0.08	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	13 Feb 2025	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2025	Normal	0.14	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
SW007	14 Dec 2016	Normal	1.4	<0.01	<0.01	<0.01	-	-	-	<0.05	-	-	<0.05	-	<0.05	<0.01	2.3	<0.01	-
	16 Dec 2016	Normal	0.03	<0.01	<0.01	<0.01	-	-	<0.05	-	-	<0.05	-	-	<0.05	<0.01	0.12	<0.01	-
	08 Feb 2017	Normal	0.05[#1]	<0.01	<0.01	<0.01	-	-	-	<0.05	-	-	<0.05	-	<0.05	<0.01	0.14	<0.01	-
	11 Feb 2020	Normal	0.04	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Feb 2020	Normal	0.17	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	0.07	<0.05	<0.05
	20 May 2020	Normal	0.04	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Jul 2020	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Aug 2020	Normal	0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	02 Nov 2020	Normal	0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Field_D	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	11 Feb 2021	Normal	0.06	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	11 Aug 2021	Normal	0.05	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07 Feb 2022	Normal	0.10	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15 Aug 2022	Normal	0.07	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Field_D	0.08	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	13 Feb 2023	Normal	0.03	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Aug 2023	Normal	0.08	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Feb 2024	Normal	0.07	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	12 Feb 2025	Normal	0.08	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2025	Normal	0.06	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		Field_D	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		Interlab_D	0.06	<0.01	<0.01	<0.01	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
SW008	06 May 2016	Normal	0.04[#2]	<0.01	<0.01	<0.01	-	-	<0.05	-	-	<0.05	-	-	<0.05	<0.01	<0.05	<0.01	-
	16 Nov 2016	Normal	0.03[#1]	<0.01	<0.01	<0.01	-	-	<0.05	-	-	<0.05	-	-	<0.05	<0.01	<0.05	<0.01	-
	14 Dec 2016	Normal	0.06	<0.01	<0.01	<0.01	-	-	<0.05	-	-	<0.05	-	-	<0.05	<0.01	<0.05	<0.01	-
	17 Dec 2016	Normal	0.02[#1]	<0.01	<0.01	<0.01	-	-	<0.05	-	-	<0.05	-	-	<0.05	<0.01	<0.05	<0.01	-
	09 Feb 2017	Normal	0.02[#1]	<0.01	<0.01	<0.01	-	-	-	<0.05	-	-	<0.05	-	<0.05	<0.01	<0.05	<0.01	-

			PFAS - Sums					PFAS
			PFAS (Sum of Total)	PFAS (Sum of Total)(WA DER List)	Sum of US EPA PFAS (PFOS + PFOA)*	Sum of PFHxS and PFOS	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	8:2 Polyfluoroalkyl phosphate diester (8:2 diPAP)
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			0.01	0.01	0.01	0.01	0.01	0.02
PFAS NEMP 3.0 2025 Freshwater 99%								
PFAS NEMP 3.0 2025 Recreational water quality						2		
Location Code	**Date**	**Sample Type**						
	14 Feb 2023	Normal	4.56	4.29	-	3.61	-	-
			-	-	-	-	-	-
	16 Aug 2023	Normal	5.03	4.76	-	3.96	-	-
			-	-	-	-	-	-
	13 Feb 2024	Normal	4.80	4.55	-	3.84	-	-
	12 Feb 2025	Normal	5.52	5.20	-	4.39	-	-
	13 Feb 2025	Normal	-	-	-	-	-	-
	28 Aug 2025	Normal	9.30	8.64	-	7.03	-	-
SW007	14 Dec 2016	Normal	-	-	-	4.7	-	-
	16 Dec 2016	Normal	-	-	-	1.02	-	-
	08 Feb 2017	Normal	-	-	-	3.37	-	-
	11 Feb 2020	Normal	0.99	0.94	-	0.72	-	-
			-	-	-	-	-	-
	26 Feb 2020	Normal	2.54	2.44	-	1.73	-	-
	20 May 2020	Normal	4.29	3.97	-	3.47	-	-
			-	-	-	-	-	-
	14 Jul 2020	Normal	0.88	0.85	-	0.76	-	-
			-	-	-	-	-	-
	26 Aug 2020	Normal	2.87	2.66	-	2.28	-	-
	02 Nov 2020	Normal	1.90	1.79	-	1.57	-	-
			-	-	-	-	-	-
		Field_D	1.70	1.60	-	1.42	-	-
	11 Feb 2021	Normal	0.90	0.88	-	0.65	-	-
	11 Aug 2021	Normal	1.74	1.59	-	1.18	-	-
			-	-	-	-	-	-
	07 Feb 2022	Normal	0.84	0.81	-	0.52	-	-
			-	-	-	-	-	-
	15 Aug 2022	Normal	2.53	2.37	-	1.90	-	-
			-	-	-	-	-	-
		Field_D	2.24	2.09	-	1.60	-	-
	13 Feb 2023	Normal	1.99	1.84	-	1.58	-	-
			-	-	-	-	-	-
	16 Aug 2023	Normal	0.94	0.91	-	0.64	-	-
			-	-	-	-	-	-
	14 Feb 2024	Normal	2.10	1.99	-	1.65	-	-
	12 Feb 2025	Normal	1.46	1.40	-	1.08	-	-
			-	-	-	-	-	-
	28 Aug 2025	Normal	2.28	2.07	-	1.51	-	-
		Field_D	2.06	1.87	-	1.53	-	-
		Interlab_D	3.1	2.84	-	2.27	-	-
SW008	06 May 2016	Normal	-	-	-	1.03	-	-
	16 Nov 2016	Normal	-	-	-	2.68	-	-
	14 Dec 2016	Normal	-	-	-	4.3	-	-
	17 Dec 2016	Normal	-	-	-	2.56	-	-
	09 Feb 2017	Normal	-	-	-	2.12	-	-

			PFAS - Unsaturated Fluorotelomer Acids	PFAS - Perfluoroalkyl Sulfonic Acids									PFAS - Perfluoroalkyl Carb						
			FOUEA (2H-Perfluoro-2-decenoic acid (8:2))	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorononanesulfonic acid (PFNS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluorooctanoic acid (PFOA)
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01		0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01
PFAS NEMP 3.0 2025 Freshwater 99%								0.00023											19
PFAS NEMP 3.0 2025 Recreational water quality								2				2							10
Location Code	**Date**	**Sample Type**																	
	10 Dec 2019	Normal	-	0.35	<0.02	-	0.07	0.77	-	0.27	-	4.53	<0.1	<0.02	<0.02	0.07	1.55	<0.02	0.10
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Feb 2020	Normal	-	0.08	<0.02	-	0.03	1.11	-	0.06	-	0.76	<0.1	<0.02	<0.02	<0.02	0.14	<0.02	0.02
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Feb 2020	Normal	-	0.10	<0.02	-	0.02	0.92	-	0.09	-	0.92	<0.1	<0.02	<0.02	0.02	0.24	<0.02	0.04
	20 May 2020	Normal	-	0.14	<0.02	-	0.06	1.90	-	0.18	-	1.74	<0.1	<0.02	<0.02	0.05	0.44	<0.02	0.07
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Jul 2020	Normal	-	0.02	<0.02	-	<0.02	0.82	-	0.03	-	0.35	<0.1	<0.02	<0.02	<0.02	0.09	<0.02	0.02
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Aug 2020	Normal	-	0.10	<0.02	-	0.03	0.80	-	0.12	-	0.90	<0.1	<0.02	<0.02	<0.02	0.22	<0.02	0.03
	02 Nov 2020	Normal	-	0.07	<0.02	-	0.03	1.06	-	0.07	-	0.72	<0.1	<0.02	<0.02	<0.02	0.12	<0.02	0.03
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Feb 2021	Normal	-	0.11	<0.02	-	0.04	2.49	-	0.09	-	0.88	<0.1	<0.02	<0.02	0.03	0.22	<0.02	0.05
	11 Aug 2021	Normal	-	0.13	<0.02	-	<0.02	0.51	-	0.13	-	0.70	<0.1	<0.02	<0.02	0.03	0.24	<0.02	0.04
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10 Feb 2022	Normal	-	0.19	<0.02	-	0.07	2.21	-	0.24	-	2.05	<0.1	<0.02	<0.02	0.05	0.55	<0.02	0.10
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15 Aug 2022	Normal	-	0.24	<0.02	-	0.06	1.28	-	0.31	-	1.89	<0.1	<0.02	<0.02	0.06	0.49	<0.02	0.11
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Feb 2023	Normal	-	0.09	<0.02	-	0.06	1.52	-	0.13	-	1.01	<0.1	<0.02	<0.02	0.02	0.24	<0.02	0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Field_D	-	0.13	<0.02	-	0.04	1.42	-	0.14	-	1.11	<0.1	<0.02	<0.02	0.03	0.24	<0.02	0.07
	16 Aug 2023	Normal	-	0.05	<0.02	-	0.03	0.97	-	0.06	-	0.89	<0.1	<0.02	<0.02	0.03	0.30	<0.02	0.04
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Feb 2024	Normal	-	0.12	<0.02	-	0.04	1.27	-	0.13	-	1.16	<0.1	<0.02	<0.02	0.04	0.33	<0.02	0.05
	12 Feb 2025	Normal	-	0.09	<0.02	-	0.04	1.07	-	0.11	-	1.15	<0.1	<0.02	<0.02	0.03	0.26	<0.02	0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2025	Normal	-	0.05	<0.02	-	0.02	0.71	-	0.06	-	0.52	<0.1	<0.02	<0.02	<0.02	0.11	<0.02	0.03
SW009	15 Nov 2016	Normal	-	0.09	<0.01	-	-	3.8[#1]	-	-	-	0.95[#1]	<0.05	<0.01	<0.01	0.02[#1]	0.29[#1]	<0.01	0.06[#1]
	16 Nov 2016	Normal	-	0.10	<0.01	-	-	3.7[#1]	-	-	-	1.0[#1]	<0.05	<0.01	<0.01	0.03[#1]	0.29[#1]	<0.01	0.07[#1]
	12 Dec 2016	Normal	-	0.06	<0.01	-	-	3.2[#1]	-	-	-	0.73[#1]	<0.05	<0.01	<0.01	0.02[#1]	0.17[#1]	<0.01	0.05[#1]
	16 Dec 2016	Normal	-	0.84	<0.01	-	-	25[#1]	-	-	-	5.3[#1]	0.27	<0.01	<0.01	0.16[#1]	2.0[#1]	0.01	0.52[#1]
	09 Feb 2017	Normal	-	0.63	<0.01	-	-	23[#1]	-	-	-	5.1[#1]	0.29	<0.01	<0.01	0.12[#1]	2.1[#1]	0.01	0.51[#1]
	10 Dec 2019	Normal	-	0.15	<0.02	-	0.04	1.34	-	0.07	-	1.00	<0.1	<0.02	<0.02	0.02	0.24	<0.02	0.03
	11 Dec 2019	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Feb 2020	Normal	-	0.42	0.04	-	0.36	25.4	-	0.57	-	8.95	0.1	<0.02	<0.02	0.13	1.39	<0.02	0.35
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Feb 2020	Normal	-	0.41	<0.02	-	0.29	16.9	-	0.51	-	7.07	<0.1	<0.02	<0.02	0.13	1.28	<0.02	0.30
	20 May 2020	Normal	-	0.25	<0.02	-	0.14	7.04	-	0.18	-	2.33	<0.1	0.02	<0.02	0.09	0.54	0.05	0.42
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Jul 2020	Normal	-	0.12	<0.02	-	0.07	2.56	-	0.11	-	1.33	<0.1	<0.02	<0.02	0.06	0.41	<0.02	0.07
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Aug 2020	Normal	-	0.42	<0.02	-	0.35	15.8	-	0.66	-	7.60	0.1	<0.02	<0.02	0.13	1.31	<0.02	0.28
	02 Nov 2020	Normal	-	0.33	0.02	-	0.19	12.7	-	0.29	-	4.57	<0.1	<0.02	<0.02	0.09	0.87	<0.02	0.19
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Feb 2021	Normal	-	0.27	<0.02	-	0.12	6.66	-	0.26	-	2.08	<0.1	<0.02	<0.02	0.12	0.73	<0.02	0.16

			oxylic Acids						PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
			Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluorooctadecanoic acid (PFODA)	Perfluoro-n-hexadecanoic acid (PFHxDA)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (PFOSA)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			0.01	0.01	0.01	0.01	0.05	0.02	0.02	0.01	0.05	0.02	0.01	0.05	0.01	0.01	0.01	0.01	0.01
PFAS NEMP 3.0 2025 Freshwater 99%																			
PFAS NEMP 3.0 2025 Recreational water quality																			
Location Code	**Date**	**Sample Type**																	
	10 Dec 2019	Normal	0.22	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Feb 2020	Normal	0.03	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Feb 2020	Normal	0.04	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	20 May 2020	Normal	0.08	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Jul 2020	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Aug 2020	Normal	0.03	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	02 Nov 2020	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Feb 2021	Normal	0.03	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	11 Aug 2021	Normal	0.05	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	0.09	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10 Feb 2022	Normal	0.09	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15 Aug 2022	Normal	0.08	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Feb 2023	Normal	0.04	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Field_D	0.05	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	16 Aug 2023	Normal	0.05	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Feb 2024	Normal	0.07	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	12 Feb 2025	Normal	0.04	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2025	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
SW009	15 Nov 2016	Normal	0.04[#1]	<0.01	<0.01	<0.01	-	-	<0.05	-	-	<0.05	-	-	<0.05	<0.01	<0.05	<0.01	-
	16 Nov 2016	Normal	0.04[#1]	<0.01	<0.01	<0.01	-	-	<0.05	-	-	<0.05	-	-	<0.05	<0.01	<0.05	<0.01	-
	12 Dec 2016	Normal	0.03[#1]	<0.01	<0.01	<0.01	-	-	-	<0.05	-	-	<0.05	-	<0.05	<0.01	0.16	<0.01	-
	16 Dec 2016	Normal	0.25[#1]	<0.01	<0.01	<0.01	-	-	<0.05	-	-	<0.05	-	-	<0.05	<0.01	<0.05	<0.01	-
	09 Feb 2017	Normal	0.23[#1]	<0.01	<0.01	<0.01	-	-	-	<0.05	-	-	<0.05	-	<0.05	<0.01	<0.05	<0.01	-
	10 Dec 2019	Normal	0.03	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	11 Dec 2019	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Feb 2020	Normal	0.31	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Feb 2020	Normal	0.30	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	20 May 2020	Normal	0.12	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	0.07	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Jul 2020	Normal	0.07	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	0.32	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Aug 2020	Normal	0.26	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	02 Nov 2020	Normal	0.18	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Feb 2021	Normal	0.13	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05

			PFAS - Sums					PFAS
			PFAS (Sum of Total)	PFAS (Sum of Total)(WA DER List)	Sum of US EPA PFAS (PFOS + PFOA)*	Sum of PFHxS and PFOS	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	8:2 Polyfluoroalkyl phosphate diester (8:2 diPAP)
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			0.01	0.01	0.01	0.01	0.01	0.02
PFAS NEMP 3.0 2025 Freshwater 99%								
PFAS NEMP 3.0 2025 Recreational water quality						2		
Location Code	**Date**	**Sample Type**						
	10 Dec 2019	Normal	7.93	7.59	-	5.30	-	-
			-	-	-	-	-	-
	11 Feb 2020	Normal	2.23	2.14	-	1.87	-	-
			-	-	-	-	-	-
	26 Feb 2020	Normal	2.39	2.28	-	1.84	-	-
	20 May 2020	Normal	4.66	4.42	-	3.64	-	-
			-	-	-	-	-	-
	14 Jul 2020	Normal	1.33	1.30	-	1.17	-	-
			-	-	-	-	-	-
	26 Aug 2020	Normal	2.23	2.08	-	1.70	-	-
	02 Nov 2020	Normal	2.10	2.00	-	1.78	-	-
			-	-	-	-	-	-
	08 Feb 2021	Normal	3.94	3.81	-	3.37	-	-
	11 Aug 2021	Normal	1.92	1.79	-	1.21	-	-
			-	-	-	-	-	-
	10 Feb 2022	Normal	5.55	5.24	-	4.26	-	-
			-	-	-	-	-	-
	15 Aug 2022	Normal	4.52	4.15	-	3.17	-	-
			-	-	-	-	-	-
	14 Feb 2023	Normal	3.16	2.97	-	2.53	-	-
			-	-	-	-	-	-
		Field_D	3.23	3.05	-	2.53	-	-
	16 Aug 2023	Normal	2.42	2.33	-	1.86	-	-
			-	-	-	-	-	-
	14 Feb 2024	Normal	3.21	3.04	-	2.43	-	-
	12 Feb 2025	Normal	2.88	2.69	-	2.22	-	-
			-	-	-	-	-	-
	28 Aug 2025	Normal	1.50	1.42	-	1.23	-	-
SW009	15 Nov 2016	Normal	-	-	-	4.75	-	-
	16 Nov 2016	Normal	-	-	-	4.7	-	-
	12 Dec 2016	Normal	-	-	-	3.93	-	-
	16 Dec 2016	Normal	-	-	-	30.3	-	-
	09 Feb 2017	Normal	-	-	-	28.1	-	-
	10 Dec 2019	Normal	2.92	2.81	-	2.34	-	-
	11 Dec 2019	Normal	-	-	-	-	-	-
	11 Feb 2020	Normal	38.0	37.0	-	34.4	-	-
			-	-	-	-	-	-
	26 Feb 2020	Normal	27.2	26.4	-	24.0	-	-
	20 May 2020	Normal	11.2	10.9	-	9.37	-	-
			-	-	-	-	-	-
	14 Jul 2020	Normal	5.12	4.94	-	3.89	-	-
			-	-	-	-	-	-
	26 Aug 2020	Normal	26.9	25.9	-	23.4	-	-
	02 Nov 2020	Normal	19.4	18.9	-	17.3	-	-
			-	-	-	-	-	-
	08 Feb 2021	Normal	10.5	10.2	-	8.74	-	-

			PFAS - Unsaturated Fluorotelomer Acids	PFAS - Perfluoroalkyl Sulfonic Acids									PFAS - Perfluoroalkyl Carb						
			FOUEA (2H-Perfluoro-2-decenoic acid (8:2))	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorononanesulfonic acid (PFNS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluorooctanoic acid (PFOA)
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01		0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01
PFAS NEMP 3.0 2025 Freshwater 99%								0.00023											19
PFAS NEMP 3.0 2025 Recreational water quality								2				2							10
Location Code	**Date**	**Sample Type**																	
	11 Aug 2021	Normal	-	0.17	<0.02	-	0.06	2.03	-	0.16	-	1.61	<0.1	<0.02	<0.02	0.04	0.35	<0.02	0.07
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Field_D	-	0.17	<0.02	-	0.07	1.92	-	0.16	-	1.56	<0.1	<0.02	<0.02	0.05	0.35	<0.02	0.07
	09 Feb 2022	Normal	-	0.32	0.03	-	0.22	11.8	-	0.41	-	4.78	0.1	<0.02	<0.02	0.09	1.23	<0.02	0.19
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15 Aug 2022	Normal	-	0.31	<0.02	-	0.20	8.44	-	0.45	-	3.93	0.1	<0.02	<0.02	<0.02	0.76	<0.02	0.21
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Feb 2023	Normal	-	0.16	<0.02	-	0.08	3.28	-	0.14	-	1.50	<0.1	<0.02	<0.02	0.04	0.36	<0.02	0.08
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Aug 2023	Normal	-	0.08	<0.02	-	0.05	2.56	-	0.06	-	0.95	<0.1	<0.02	<0.02	0.02	0.18	<0.02	0.06
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Field_D	-	0.08	<0.02	-	0.05	2.61	-	0.06	-	0.98	<0.1	<0.02	<0.02	0.03	0.18	<0.02	0.06
		Interlab_D	-	0.06	<0.02	-	0.05	1.8	-	0.07	-	0.77	<0.02	<0.02	<0.05	0.02	0.15	<0.01	0.04
	14 Feb 2024	Normal	-	0.18	<0.02	-	0.08	3.54	-	0.15	-	1.67	<0.1	<0.02	<0.02	0.04	0.35	<0.02	0.09
	12 Feb 2025	Normal	-	0.16	<0.02	-	0.10	4.50	-	0.16	-	2.32	<0.1	<0.02	<0.02	0.05	0.46	<0.02	0.11
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2025	Normal	-	0.19	<0.02	-	0.20	7.45	-	0.25	-	3.34	<0.1	<0.02	<0.02	0.07	0.59	<0.02	0.19
SW012	06 May 2016	Normal	-	0.19	<0.01	-	-	0.43[#2]	-	-	-	0.98[#2]	<0.05	<0.01	<0.01	0.04[#2]	0.23[#2]	<0.01	0.05[#2]
	16 Nov 2016	Normal	-	0.27	<0.01	-	-	2.6[#1]	-	-	-	1.8[#1]	0.06	<0.01	<0.01	0.05[#1]	0.47[#1]	<0.01	0.09[#1]
	14 Dec 2016	Normal	-	0.27	<0.01	-	-	2.2[#1]	-	-	-	2.0[#1]	<0.05	<0.01	<0.01	0.05[#1]	0.35[#1]	<0.01	0.08[#1]
		Field_D	-	0.28	<0.01	-	-	2.9[#1]	-	-	-	2.0[#1]	0.06	<0.01	<0.01	0.04[#1]	0.44[#1]	<0.01	0.10[#1]
	17 Dec 2016	Normal	-	0.27	<0.01	-	-	2.3[#1]	-	-	-	1.9[#1]	0.06	<0.01	<0.01	0.04[#1]	0.41[#1]	<0.01	0.09[#1]
	09 Feb 2017	Normal	-	0.19	<0.01	-	-	4.3[#1]	-	-	-	1.3[#1]	0.06	<0.01	<0.01	0.03[#1]	0.34[#1]	<0.01	0.09[#1]
	10 Dec 2019	Normal	-	<0.02	<0.02	-	0.02	0.84	-	<0.02	-	0.30	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	0.01
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Field_D	-	<0.02	<0.02	-	0.02	0.83	-	<0.02	-	0.29	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	0.01
	11 Feb 2020	Normal	-	0.02	<0.02	-	<0.02	0.13	-	<0.02	-	0.21	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Field_D	-	0.02	<0.02	-	<0.02	0.20	-	0.02	-	0.23	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
	26 Feb 2020	Normal	-	0.03	<0.02	-	<0.02	0.08	-	<0.02	-	0.22	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.01
	14 Jul 2020	Normal	-	<0.02	<0.02	-	<0.02	0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Aug 2020	Normal	-	0.02	<0.02	-	<0.02	0.10	-	0.03	-	0.19	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
	08 Feb 2021	Normal	-	<0.02	<0.02	-	<0.02	0.03	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
	11 Aug 2021	Normal	-	<0.02	<0.02	-	<0.02	0.03	-	<0.02	-	0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10 Feb 2022	Normal	-	0.18	<0.02	-	0.05	1.18	-	0.18	-	1.43	<0.1	<0.02	<0.02	0.04	0.26	<0.02	0.06
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15 Aug 2022	Normal	-	0.35	<0.02	-	0.11	3.25	-	0.42	-	3.15	<0.1	<0.02	<0.02	0.08	0.54	<0.02	0.13
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Feb 2023	Normal	-	0.20	<0.02	-	0.10	2.70	-	0.20	-	1.74	<0.1	<0.02	<0.02	0.05	0.31	<0.02	0.07
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Interlab_D	-	0.23	<0.02	-	0.11	2.8	-	0.24	-	2.4	0.05	<0.02	<0.05	0.07	0.36	<0.01	0.09
	16 Aug 2023	Normal	-	0.37	<0.02	-	0.17	3.79	-	0.34	-	3.87	<0.1	<0.02	<0.02	0.11	0.60	<0.02	0.17
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Feb 2024	Normal	-	0.32	<0.02	-	0.15	4.92	-	0.31	-	3.00	<0.1	<0.02	<0.02	0.10	0.54	<0.02	0.13

			boxylic Acids						PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
			Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluorooctadecanoic acid (PFODA)	Perfluoro-n-hexadecanoic acid (PFHxDA)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (PFOSA)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			0.01	0.01	0.01	0.01	0.05	0.02	0.02	0.01	0.05	0.02	0.01	0.05	0.01	0.01	0.01	0.01	0.01
PFAS NEMP 3.0 2025 Freshwater 99%																			
PFAS NEMP 3.0 2025 Recreational water quality																			
Location Code	**Date**	**Sample Type**																	
	11 Aug 2021	Normal	0.08	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Field_D	0.07	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	09 Feb 2022	Normal	0.23	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	1.11	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15 Aug 2022	Normal	0.14	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	0.06	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Feb 2023	Normal	0.09	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Aug 2023	Normal	0.04	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Field_D	0.04	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		Interlab_D	0.04	<0.5	<0.1	<0.02	-	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
	14 Feb 2024	Normal	0.09	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	12 Feb 2025	Normal	0.10	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2025	Normal	0.11	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
SW012	06 May 2016	Normal	0.05[#2]	<0.01	<0.01	<0.01	-	-	<0.05	-	-	<0.05	-	-	<0.05	<0.01	<0.05	<0.01	-
	16 Nov 2016	Normal	0.07[#1]	<0.01	<0.01	<0.01	-	-	<0.05	-	-	<0.05	-	-	<0.05	<0.01	<0.05	<0.01	-
	14 Dec 2016	Normal	0.04[#1]	<0.01	<0.01	<0.01	-	-	<0.05	-	-	<0.05	-	-	<0.05	<0.01	<0.05	<0.01	-
		Field_D	0.05	<0.01	<0.01	<0.01	-	-	<0.05	-	-	<0.05	-	-	<0.05	<0.01	<0.05	<0.01	-
	17 Dec 2016	Normal	0.05[#1]	<0.01	<0.01	<0.01	-	-	<0.05	-	-	<0.05	-	-	<0.05	<0.01	<0.05	<0.01	-
	09 Feb 2017	Normal	0.06[#1]	<0.01	<0.01	<0.01	-	-	-	<0.05	-	-	<0.05	-	<0.05	<0.01	<0.05	<0.01	-
	10 Dec 2019	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Field_D	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	11 Feb 2020	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Field_D	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	26 Feb 2020	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	14 Jul 2020	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Aug 2020	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	08 Feb 2021	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	11 Aug 2021	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10 Feb 2022	Normal	0.06	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15 Aug 2022	Normal	0.10	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Feb 2023	Normal	0.09	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Interlab_D	0.1	<0.5	<0.1	<0.02	-	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
	16 Aug 2023	Normal	0.18	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Feb 2024	Normal	0.20	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05

			PFAS - Sums					PFAS
			PFAS (Sum of Total)	PFAS (Sum of Total)(WA DER List)	Sum of US EPA PFAS (PFOS + PFOA)*	Sum of PFHxS and PFOS	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	8:2 Polyfluoroalkyl phosphate diester (8:2 diPAP)
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			0.01	0.01	0.01	0.01	0.01	0.02
PFAS NEMP 3.0 2025 Freshwater 99%								
PFAS NEMP 3.0 2025 Recreational water quality						2		
Location Code	**Date**	**Sample Type**						
	11 Aug 2021	Normal	4.57	4.35	-	3.64	-	-
			-	-	-	-	-	-
		Field_D	4.42	4.19	-	3.48	-	-
	09 Feb 2022	Normal	20.5	19.8	-	16.6	-	-
			-	-	-	-	-	-
	15 Aug 2022	Normal	14.6	14.0	-	12.4	-	-
			-	-	-	-	-	-
	13 Feb 2023	Normal	5.73	5.51	-	4.78	-	-
			-	-	-	-	-	-
	16 Aug 2023	Normal	4.00	3.89	-	3.51	-	-
			-	-	-	-	-	-
		Field_D	4.09	3.98	-	3.59	-	-
		Interlab_D	3.0	-	1.8	2.5	-	-
	14 Feb 2024	Normal	6.19	5.96	-	5.21	-	-
	12 Feb 2025	Normal	8.06	7.70	-	6.82	-	-
			-	-	-	-	-	-
	28 Aug 2025	Normal	12.5	11.9	-	10.8	-	-
SW012	06 May 2016	Normal	-	-	-	1.41	-	-
	16 Nov 2016	Normal	-	-	-	4.4	-	-
	14 Dec 2016	Normal	-	-	-	4.2	-	-
		Field_D	-	-	-	4.9	-	-
	17 Dec 2016	Normal	-	-	-	4.2	-	-
	09 Feb 2017	Normal	-	-	-	5.6	-	-
	10 Dec 2019	Normal	1.20	1.18	-	1.14	-	-
			-	-	-	-	-	-
		Field_D	1.18	1.16	-	1.12	-	-
	11 Feb 2020	Normal	0.36	0.36	-	0.34	-	-
			-	-	-	-	-	-
		Field_D	0.47	0.45	-	0.43	-	-
	26 Feb 2020	Normal	0.36	0.36	-	0.30	-	-
	14 Jul 2020	Normal	0.02	0.02	-	0.02	-	-
			-	-	-	-	-	-
	26 Aug 2020	Normal	0.34	0.31	-	0.29	-	-
	08 Feb 2021	Normal	0.03	0.03	-	0.03	-	-
	11 Aug 2021	Normal	0.05	0.05	-	0.05	-	-
			-	-	-	-	-	-
	10 Feb 2022	Normal	3.44	3.21	-	2.61	-	-
			-	-	-	-	-	-
	15 Aug 2022	Normal	8.13	7.60	-	6.40	-	-
			-	-	-	-	-	-
	14 Feb 2023	Normal	5.46	5.16	-	4.44	-	-
			-	-	-	-	-	-
		Interlab_D	6.4	-	2.9	5.2	-	-
	16 Aug 2023	Normal	9.60	9.09	-	7.66	-	-
			-	-	-	-	-	-
	14 Feb 2024	Normal	9.67	9.21	-	7.92	-	-

			PFAS - Unsaturated Fluorotelomer Acids	PFAS - Perfluoroalkyl Sulfonic Acids									PFAS - Perfluoroalkyl Carb						
			FOUEA (2H-Perfluoro-2-decenoic acid (8:2))	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorononanesulfonic acid (PFNS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluorooctanoic acid (PFOA)
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01		0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01
PFAS NEMP 3.0 2025 Freshwater 99%								0.00023											19
PFAS NEMP 3.0 2025 Recreational water quality								2				2							10
Location Code	**Date**	**Sample Type**																	
		Field_D	-	0.31	<0.02	-	0.13	4.86	-	0.30	-	3.20	<0.1	<0.02	<0.02	0.11	0.54	<0.02	0.14
		Interlab_D	-	0.25	<0.02	-	0.12	3.9	-	0.27	-	3.1	0.09	<0.02	<0.05	0.11	0.52	<0.01	0.12
	11 Feb 2025	Normal	-	<0.02	<0.02	-	<0.02	0.02	-	<0.02	-	<0.01	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
	12 Feb 2025	Normal	-	0.30	<0.02	-	0.12	3.76	-	0.26	-	2.77	<0.1	<0.02	<0.02	0.08	0.52	<0.02	0.12
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2025	Normal	-	0.06	<0.02	-	0.03	0.85	-	0.07	-	0.71	<0.1	<0.02	<0.02	<0.02	0.10	<0.02	0.03
SW013	14 Nov 2016	Normal	-	0.27	<0.01	-	-	2.7[#1]	-	-	-	1.7[#1]	0.06	<0.01	<0.01	0.04[#1]	0.42[#1]	<0.01	0.07[#1]
	13 Dec 2016	Normal	-	<0.01	<0.01	-	-	<0.01	-	-	-	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	16 Dec 2016	Normal	-	0.12	<0.01	-	-	2.3[#1]	-	-	-	1.0[#1]	<0.05	<0.01	<0.01	0.02[#1]	0.23[#1]	<0.01	0.05[#1]
	08 Feb 2017	Normal	-	0.03	<0.01	-	-	0.64[#1]	-	-	-	0.29[#1]	<0.05	<0.01	<0.01	<0.01	0.07[#1]	<0.01	0.02[#1]
	28 Mar 2017	Normal	-	0.12	<0.01	-	0.05[#1]	2.2[#1]	-	0.11[#1]	-	1.5[#1]	<0.05	<0.01	<0.01	0.03[#1]	0.27[#1]	<0.01	0.06[#1]
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Nov 2019	Interlab_D	<0.01	0.27	<0.01	-	0.034	0.83	-	0.22	<0.01	1.8	0.086	<0.01	<0.01	0.067	0.46	<0.01	0.064
	10 Dec 2019	Normal	-	0.36	<0.02	-	0.05	0.78	-	0.30	-	2.84	<0.1	<0.02	<0.02	0.07	0.76	<0.02	0.06
	11 Dec 2019	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Feb 2020	Normal	-	0.08	<0.02	-	0.02	0.82	-	0.07	-	0.71	<0.1	<0.02	<0.02	<0.02	0.13	<0.02	0.03
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Interlab_D	<0.01	0.064	<0.01	-	0.016	0.61	-	0.059	<0.01	0.57	<0.05	<0.01	<0.01	0.014	0.10	<0.01	0.019
	26 Feb 2020	Normal	-	0.17	<0.02	-	0.05	1.41	-	0.15	-	1.54	<0.1	<0.02	<0.02	0.05	0.39	<0.02	0.08
		Field_D	-	0.16	<0.02	-	0.05	1.55	-	0.15	-	1.55	<0.1	<0.02	<0.02	0.04	0.38	<0.02	0.08
	20 May 2020	Normal	-	0.24	<0.02	-	0.08	1.57	-	0.23	-	1.84	<0.1	<0.02	<0.02	0.06	0.35	<0.02	0.07
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Field_D	-	0.22	<0.02	-	0.07	1.47	-	0.23	-	1.74	<0.1	<0.02	<0.02	0.06	0.35	<0.02	0.08
	14 Jul 2020	Normal	-	0.23	<0.02	-	0.06	1.18	-	0.26	-	2.23	<0.1	<0.02	<0.02	0.07	0.51	<0.02	0.07
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Field_D	-	0.23	<0.02	-	0.06	1.12	-	0.25	-	2.02	<0.1	<0.02	<0.02	0.07	0.50	<0.02	0.06
	26 Aug 2020	Normal	-	0.10	<0.02	-	0.03	0.78	-	0.10	-	0.76	<0.1	<0.02	<0.02	<0.02	0.16	<0.02	0.03
		Field_D	-	0.10	<0.02	-	0.03	0.62	-	0.11	-	0.82	<0.1	<0.02	<0.02	<0.02	0.18	<0.02	0.03
	02 Nov 2020	Normal	-	0.09	<0.02	-	0.03	0.84	-	0.08	-	0.77	<0.1	<0.02	<0.02	<0.02	0.15	<0.02	0.03
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Interlab_D	<0.01	0.071	<0.01	-	0.015	0.53	-	0.061	<0.01	0.61	<0.05	<0.01	<0.01	0.015	0.1	<0.01	0.021
	08 Feb 2021	Normal	-	0.25	<0.02	-	0.06	2.25	-	0.18	-	1.30	<0.1	<0.02	<0.02	0.07	0.35	<0.02	0.08
	11 Aug 2021	Normal	-	0.30	<0.02	-	0.07	1.22	-	0.31	-	2.44	<0.1	<0.02	<0.02	0.07	0.44	<0.02	0.08
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Feb 2022	Normal	-	0.18	<0.02	-	0.06	1.64	-	0.18	-	1.54	<0.1	<0.02	<0.02	0.04	0.32	<0.02	0.07
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Field_D	-	0.17	<0.02	-	0.05	1.15	-	0.17	-	1.44	<0.1	<0.02	<0.02	0.04	0.31	<0.02	0.06
	15 Aug 2022	Normal	-	0.19	<0.02	-	0.04	1.03	-	0.21	-	1.16	<0.1	<0.02	<0.02	0.04	0.27	<0.02	0.06
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15 Feb 2023	Normal	-	0.16	<0.02	-	0.08	1.59	-	0.17	-	1.49	<0.1	<0.02	<0.02	0.04	0.26	<0.02	0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Aug 2023	Normal	-	0.24	<0.02	-	0.05	1.03	-	0.19	-	1.75	<0.1	<0.02	<0.02	0.08	0.43	<0.02	0.08
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Feb 2024	Normal	-	0.19	<0.02	-	0.06	1.61	-	0.18	-	1.50	<0.1	<0.02	<0.02	0.04	0.28	<0.02	0.06
	13 Feb 2025	Normal	-	0.13	<0.02	-	0.07	2.26	-	0.13	-	1.51	<0.1	<0.02	<0.02	0.04	0.30	<0.02	0.06
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

			boxylic Acids						PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
			Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluorooctadecanoic acid (PFODA)	Perfluoro-n-hexadecanoic acid (PFHxDA)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (PFOSA)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			0.01	0.01	0.01	0.01	0.05	0.02	0.02	0.01	0.05	0.02	0.01	0.05	0.01	0.01	0.01	0.01	0.01
PFAS NEMP 3.0 2025 Freshwater 99%																			
PFAS NEMP 3.0 2025 Recreational water quality																			
Location Code	**Date**	**Sample Type**																	
		Field_D	0.19	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		Interlab_D	0.2	<0.5	<0.1	<0.02	-	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
	11 Feb 2025	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	12 Feb 2025	Normal	0.14	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2025	Normal	0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
SW013	14 Nov 2016	Normal	0.06[#1]	<0.01	<0.01	<0.01	-	-	<0.05	-	-	<0.05	-	-	<0.05	<0.01	<0.05	<0.01	-
	13 Dec 2016	Normal	<0.01	<0.01	<0.01	<0.01	-	-	-	<0.05	-	-	<0.05	-	<0.05	<0.01	<0.05	<0.01	-
	16 Dec 2016	Normal	0.04	<0.01	<0.01	<0.01	-	-	<0.05	-	-	<0.05	-	-	<0.05	<0.01	<0.05	<0.01	-
	08 Feb 2017	Normal	<0.01	<0.01	<0.01	<0.01	-	-	-	<0.05	-	-	<0.05	-	<0.05	<0.01	<0.05	<0.01	-
	28 Mar 2017	Normal	0.07[#1]	<0.01	<0.01	<0.01	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Nov 2019	Interlab_D	0.13	<0.02	<0.02	<0.01	<0.05	<0.02	<0.02	<0.01	<0.05	<0.02	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01
	10 Dec 2019	Normal	0.12	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	11 Dec 2019	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Feb 2020	Normal	0.03	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Interlab_D	0.031	<0.02	<0.02	<0.01	<0.05	<0.02	<0.02	<0.01	<0.05	<0.02	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01
	26 Feb 2020	Normal	0.11	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		Field_D	0.11	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	20 May 2020	Normal	0.10	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Field_D	0.10	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	14 Jul 2020	Normal	0.10	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Field_D	0.10	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	26 Aug 2020	Normal	0.03	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		Field_D	0.03	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	02 Nov 2020	Normal	0.03	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Interlab_D	0.027	<0.02	<0.02	<0.01	<0.05	<0.02	<0.02	<0.01	<0.05	<0.02	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01
	08 Feb 2021	Normal	0.07	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	11 Aug 2021	Normal	0.09	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Feb 2022	Normal	0.07	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Field_D	0.06	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	15 Aug 2022	Normal	0.05	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15 Feb 2023	Normal	0.06	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Aug 2023	Normal	0.13	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Feb 2024	Normal	0.09	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	13 Feb 2025	Normal	0.06	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

			PFAS - Sums					PFAS
			PFAS (Sum of Total)	PFAS (Sum of Total)(WA DER List)	Sum of US EPA PFAS (PFOS + PFOA)*	Sum of PFHxS and PFOS	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	8:2 Polyfluoroalkyl phosphate diester (8:2 diPAP)
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			0.01	0.01	0.01	0.01	0.01	0.02
PFAS NEMP 3.0 2025 Freshwater 99%								
PFAS NEMP 3.0 2025 Recreational water quality						2		
Location Code	**Date**	**Sample Type**						
		Field_D	9.78	9.35	-	8.06	-	-
		Interlab_D	8.6	-	4.0	6.9	-	-
	11 Feb 2025	Normal	0.02	0.02	-	0.02	-	-
	12 Feb 2025	Normal	8.22	7.69	-	6.53	-	-
			-	-	-	-	-	-
	28 Aug 2025	Normal	1.90	1.77	-	1.56	-	-
SW013	14 Nov 2016	Normal	-	-	-	4.4	-	-
	13 Dec 2016	Normal	-	-	-	<0.01	-	-
	16 Dec 2016	Normal	-	-	-	3.3	-	-
	08 Feb 2017	Normal	-	-	-	0.93	-	-
	28 Mar 2017	Normal	-	-	-	3.7	-	-
			-	-	-	-	-	-
	12 Nov 2019	Interlab_D	-	-	-	2.63	-	<0.02
	10 Dec 2019	Normal	5.34	4.99	-	3.62	-	-
	11 Dec 2019	Normal	-	-	-	-	-	-
	11 Feb 2020	Normal	1.89	1.80	-	1.53	-	-
			-	-	-	-	-	-
		Interlab_D	-	-	-	1.18	-	<0.02
	26 Feb 2020	Normal	3.95	3.75	-	2.95	-	-
		Field_D	4.07	3.87	-	3.10	-	-
	20 May 2020	Normal	4.54	4.23	-	3.41	-	-
			-	-	-	-	-	-
		Field_D	4.32	4.02	-	3.21	-	-
	14 Jul 2020	Normal	4.71	4.39	-	3.41	-	-
			-	-	-	-	-	-
		Field_D	4.41	4.10	-	3.14	-	-
	26 Aug 2020	Normal	1.99	1.86	-	1.54	-	-
		Field_D	1.92	1.78	-	1.44	-	-
	02 Nov 2020	Normal	2.02	1.91	-	1.61	-	-
			-	-	-	-	-	-
		Interlab_D	-	-	-	1.14	-	<0.02
	08 Feb 2021	Normal	4.61	4.37	-	3.55	-	-
	11 Aug 2021	Normal	5.02	4.64	-	3.66	-	-
			-	-	-	-	-	-
	08 Feb 2022	Normal	4.10	3.86	-	3.18	-	-
			-	-	-	-	-	-
		Field_D	3.45	3.23	-	2.59	-	-
	15 Aug 2022	Normal	3.05	2.80	-	2.19	-	-
			-	-	-	-	-	-
	15 Feb 2023	Normal	3.90	3.65	-	3.08	-	-
			-	-	-	-	-	-
	16 Aug 2023	Normal	3.98	3.74	-	2.78	-	-
			-	-	-	-	-	-
	13 Feb 2024	Normal	4.01	3.77	-	3.11	-	-
	13 Feb 2025	Normal	4.62	4.36	-	3.77	-	-
			-	-	-	-	-	-

			PFAS - Unsaturated Fluorotelomer Acids	PFAS - Perfluoroalkyl Sulfonic Acids									PFAS - Perfluoroalkyl Carb						
			FOUEA (2H-Perfluoro-2-decenoic acid (8:2))	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorononanesulfonic acid (PFNS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluorooctanoic acid (PFOA)
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01		0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01
PFAS NEMP 3.0 2025 Freshwater 99%								0.00023											19
PFAS NEMP 3.0 2025 Recreational water quality								2				2							10
Location Code	**Date**	**Sample Type**																	
	28 Aug 2025	Normal	-	0.06	<0.02	-	0.03	1.48	-	0.08	-	0.80	<0.1	<0.02	<0.02	<0.02	0.13	<0.02	0.04
SW014	14 Nov 2016	Normal	-	<0.01	<0.01	-	-	<0.01	-	-	-	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	13 Dec 2016	Normal	-	<0.01	<0.01	-	-	<0.01	-	-	-	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	16 Dec 2016	Normal	-	0.22	<0.01	-	-	3.1[#1]	-	-	-	1.8[#1]	0.06	<0.01	<0.01	0.04[#1]	0.41[#1]	<0.01	0.08[#1]
	08 Feb 2017	Normal	-	0.02	<0.01	-	-	0.57[#1]	-	-	-	0.21[#1]	<0.05	<0.01	<0.01	<0.01	0.06[#1]	<0.01	0.02[#1]
	28 Mar 2017	Normal	-	0.02	<0.01	-	<0.01	0.25[#1]	-	0.02[#1]	-	0.21[#1]	<0.05	<0.01	<0.01	<0.01	0.04[#1]	<0.01	0.01[#1]
	10 Dec 2019	Normal	-	0.24	<0.02	-	0.05	0.78	-	0.21	-	2.02	<0.1	<0.02	<0.02	0.04	0.43	<0.02	0.04
	11 Dec 2019	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Feb 2020	Normal	-	<0.02	<0.02	-	<0.02	<0.01	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Feb 2020	Normal	-	<0.02	<0.02	-	<0.02	<0.01	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
	20 May 2020	Normal	-	<0.02	<0.02	-	<0.02	<0.01	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Jul 2020	Normal	-	<0.02	<0.02	-	<0.02	<0.01	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Interlab_D	<0.01	<0.01	<0.01	-	<0.01	<0.02	-	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	26 Aug 2020	Normal	-	<0.02	<0.02	-	<0.02	0.03	-	<0.02	-	0.04	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
		Interlab_D	-	<0.01	<0.02	-	<0.01	0.03	-	<0.01	-	0.03	<0.02	<0.02	<0.05	<0.01	<0.01	<0.01	<0.01
	02 Nov 2020	Normal	-	<0.02	<0.02	-	<0.02	<0.01	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Feb 2021	Normal	-	<0.02	<0.02	-	<0.02	<0.01	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
	11 Aug 2021	Normal	-	<0.02	<0.02	-	<0.02	<0.01	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Interlab_D	<0.01	0.019	<0.01	-	<0.01	0.14	-	0.016	<0.01	0.14	<0.05	<0.01	<0.01	<0.01	0.028	<0.01	<0.01
	08 Feb 2022	Normal	-	<0.02	<0.02	-	<0.02	<0.01	-	<0.02	-	<0.01	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15 Aug 2022	Normal	-	<0.02	<0.02	-	<0.02	0.01	-	<0.02	-	<0.01	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15 Feb 2023	Normal	-	<0.02	<0.02	-	<0.02	<0.01	-	<0.02	-	<0.01	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Aug 2023	Normal	-	<0.02	<0.02	-	<0.02	<0.01	-	<0.02	-	<0.01	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Feb 2024	Normal	-	<0.02	<0.02	-	<0.02	<0.01	-	<0.02	-	<0.01	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
	13 Feb 2025	Normal	-	0.03	<0.02	-	<0.02	0.33	-	0.03	-	0.29	<0.1	<0.02	<0.02	<0.02	0.04	<0.02	<0.01
	28 Aug 2025	Normal	-	<0.02	<0.02	-	<0.02	<0.01	-	<0.02	-	<0.01	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
SW018	16 Nov 2016	Normal	-	0.97	<0.01	-	-	8.6[#1]	-	-	-	6.1[#1]	0.12	<0.01	<0.01	0.13[#1]	1.3[#1]	<0.01	0.28[#1]
	16 Dec 2016	Normal	-	0.14	<0.01	-	-	2.3[#1]	-	-	-	1.1[#1]	0.07	<0.01	<0.01	0.05[#1]	0.42[#1]	<0.01	0.10[#1]
		Field_D	-	0.16	<0.01	-	-	2.5[#1]	-	-	-	1.2[#1]	0.06	<0.01	<0.01	0.05[#1]	0.43[#1]	<0.01	0.10[#1]
	08 Feb 2017	Normal	-	0.11	<0.01	-	-	3.7[#1]	-	-	-	0.93[#1]	<0.05	<0.01	<0.01	0.02[#1]	0.32[#1]	<0.01	0.09[#1]
		Field_D	-	0.12	<0.01	-	-	3.7[#1]	-	-	-	0.97[#1]	0.05	<0.01	<0.01	0.03[#1]	0.32[#1]	<0.01	0.09[#1]
	11 Feb 2020	Normal	-	0.29	<0.02	-	0.08	2.28	-	0.23	-	1.72	<0.1	<0.02	<0.02	0.06	0.48	<0.02	0.09
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Feb 2020	Normal	-	0.26	<0.02	-	0.07	2.18	-	0.21	-	1.54	<0.1	<0.02	<0.02	0.09	0.46	<0.02	0.11
		Interlab_D	<0.01	0.23	<0.01	-	0.052	1.8	-	0.19	<0.01	1.7	0.092	<0.01	<0.01	0.053	0.41	<0.01	0.074
	20 May 2020	Normal	-	1.66	<0.02	-	0.40	7.16	-	1.68	-	8.29	0.4	<0.02	<0.02	0.46	2.99	0.03	0.50
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

			boxylic Acids						PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
			Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluorooctadecanoic acid (PFODA)	Perfluoro-n-hexadecanoic acid (PFHxDA)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (PFOSA)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			0.01	0.01	0.01	0.01	0.05	0.02	0.02	0.01	0.05	0.02	0.01	0.05	0.01	0.01	0.01	0.01	0.01
PFAS NEMP 3.0 2025 Freshwater 99%																			
PFAS NEMP 3.0 2025 Recreational water quality																			
Location Code	**Date**	**Sample Type**																	
	28 Aug 2025	Normal	0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
SW014	14 Nov 2016	Normal	<0.01	<0.01	<0.01	<0.01	-	-	<0.05	-	-	<0.05	-	-	<0.05	<0.01	<0.05	<0.01	-
	13 Dec 2016	Normal	<0.01	<0.01	<0.01	<0.01	-	-	-	<0.05	-	-	<0.05	-	<0.05	<0.01	<0.05	<0.01	-
	16 Dec 2016	Normal	0.05[#1]	<0.01	<0.01	<0.01	-	-	<0.05	-	-	<0.05	-	-	<0.05	<0.01	<0.05	<0.01	-
	08 Feb 2017	Normal	<0.01	<0.01	<0.01	<0.01	-	-	-	<0.05	-	-	<0.05	-	<0.05	<0.01	<0.05	<0.01	-
	28 Mar 2017	Normal	0.01[#1]	<0.01	<0.01	<0.01	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
	10 Dec 2019	Normal	0.07	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	11 Dec 2019	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Feb 2020	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Feb 2020	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	20 May 2020	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Jul 2020	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Interlab_D	<0.02	<0.02	<0.02	<0.01	<0.05	<0.02	<0.02	<0.01	<0.05	<0.02	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01
	26 Aug 2020	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		Interlab_D	<0.02	<0.5	<0.1	<0.02	-	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
	02 Nov 2020	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Feb 2021	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	11 Aug 2021	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Interlab_D	<0.02	<0.02	<0.02	<0.01	<0.05	<0.02	<0.02	<0.01	<0.05	<0.02	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01
	08 Feb 2022	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15 Aug 2022	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15 Feb 2023	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Aug 2023	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Feb 2024	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	13 Feb 2025	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	28 Aug 2025	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
SW018	16 Nov 2016	Normal	0.18[#1]	<0.01	<0.01	<0.01	-	-	<0.05	-	-	<0.05	-	-	<0.05	<0.01	<0.05	<0.01	-
	16 Dec 2016	Normal	0.06	<0.01	<0.01	<0.01	-	-	<0.05	-	-	<0.05	-	-	<0.05	<0.01	0.90	<0.01	-
		Field_D	0.06	<0.01	<0.01	<0.01	-	-	<0.05	-	-	<0.05	-	-	<0.05	<0.01	0.89	<0.01	-
	08 Feb 2017	Normal	0.04[#1]	<0.01	<0.01	<0.01	-	-	-	<0.05	-	-	<0.05	-	<0.05	<0.01	0.05	<0.01	-
		Field_D	0.05[#1]	<0.01	<0.01	<0.01	-	-	-	<0.05	-	-	<0.05	-	<0.05	<0.01	0.05	<0.01	-
	11 Feb 2020	Normal	0.14	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Feb 2020	Normal	0.14	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		Interlab_D	0.12	<0.02	<0.02	<0.01	<0.05	<0.02	<0.02	<0.01	<0.05	<0.02	<0.01	<0.05	<0.01	<0.01	0.015	<0.01	<0.01
	20 May 2020	Normal	0.69	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

			PFAS - Sums					PFAS
			PFAS (Sum of Total)	PFAS (Sum of Total)(WA DER List)	Sum of US EPA PFAS (PFOS + PFOA)*	Sum of PFHxS and PFOS	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	8:2 Polyfluoroalkyl phosphate diester (8:2 diPAP)
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			0.01	0.01	0.01	0.01	0.01	0.02
PFAS NEMP 3.0 2025 Freshwater 99%								
PFAS NEMP 3.0 2025 Recreational water quality						2		
Location Code	**Date**	**Sample Type**						
	28 Aug 2025	Normal	2.66	2.53	-	2.28	-	-
SW014	14 Nov 2016	Normal	-	-	-	<0.01	-	-
	13 Dec 2016	Normal	-	-	-	<0.01	-	-
	16 Dec 2016	Normal	-	-	-	4.9	-	-
	08 Feb 2017	Normal	-	-	-	0.78	-	-
	28 Mar 2017	Normal	-	-	-	0.46	-	-
	10 Dec 2019	Normal	3.88	3.62	-	2.80	-	-
	11 Dec 2019	Normal	-	-	-	-	-	-
	11 Feb 2020	Normal	<0.01	<0.01	-	<0.01	-	-
			-	-	-	-	-	-
	26 Feb 2020	Normal	<0.01	<0.01	-	<0.01	-	-
	20 May 2020	Normal	<0.01	<0.01	-	<0.01	-	-
			-	-	-	-	-	-
	14 Jul 2020	Normal	<0.01	<0.01	-	<0.01	-	-
			-	-	-	-	-	-
		Interlab_D	-	-	-	<0.02	-	<0.02
	26 Aug 2020	Normal	0.07	0.07	-	0.07	-	-
		Interlab_D	0.06	-	0.03	0.06	-	-
	02 Nov 2020	Normal	<0.01	<0.01	-	<0.01	-	-
			-	-	-	-	-	-
	08 Feb 2021	Normal	<0.01	<0.01	-	<0.01	-	-
	11 Aug 2021	Normal	<0.01	<0.01	-	<0.01	-	-
			-	-	-	-	-	-
		Interlab_D	-	-	-	0.28	-	<0.02
	08 Feb 2022	Normal	<0.01	<0.01	-	<0.01	-	-
			-	-	-	-	-	-
	15 Aug 2022	Normal	0.01	0.01	-	0.01	-	-
			-	-	-	-	-	-
	15 Feb 2023	Normal	<0.01	<0.01	-	<0.01	-	-
			-	-	-	-	-	-
	16 Aug 2023	Normal	<0.01	<0.01	-	<0.01	-	-
			-	-	-	-	-	-
	13 Feb 2024	Normal	<0.01	<0.01	-	<0.01	-	-
	13 Feb 2025	Normal	0.72	0.69	-	0.62	-	-
	28 Aug 2025	Normal	<0.01	<0.01	-	<0.01	-	-
SW018	16 Nov 2016	Normal	-	-	-	14.7	-	-
	16 Dec 2016	Normal	-	-	-	3.4	-	-
		Field_D	-	-	-	3.7	-	-
	08 Feb 2017	Normal	-	-	-	4.63	-	-
		Field_D	-	-	-	4.67	-	-
	11 Feb 2020	Normal	5.37	5.06	-	4.00	-	-
			-	-	-	-	-	-
	26 Feb 2020	Normal	5.06	4.78	-	3.72	-	-
		Interlab_D	-	-	-	3.5	-	<0.02
	20 May 2020	Normal	24.3	22.2	-	15.4	-	-
			-	-	-	-	-	-

			PFAS - Unsaturated Fluorotelomer Acids	PFAS - Perfluoroalkyl Sulfonic Acids									PFAS - Perfluoroalkyl Carb						
			FOUEA (2H-Perfluoro-2-decenoic acid (8:2))	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorononanesulfonic acid (PFNS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluorooctanoic acid (PFOA)
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01		0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01
PFAS NEMP 3.0 2025 Freshwater 99%								0.00023											19
PFAS NEMP 3.0 2025 Recreational water quality								2				2							10
Location Code	**Date**	**Sample Type**																	
	14 Jul 2020	Normal	-	0.05	<0.02	-	0.02	0.71	-	0.06	-	0.56	<0.1	<0.02	<0.02	0.03	0.14	<0.02	0.02
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Aug 2020	Normal	-	0.23	<0.02	-	0.05	0.80	-	0.31	-	2.16	<0.1	<0.02	<0.02	0.07	0.35	<0.02	0.05
	02 Nov 2020	Normal	-	0.71	<0.02	-	0.19	5.02	-	0.71	-	5.19	0.2	<0.02	<0.02	0.21	1.59	<0.02	0.29
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Feb 2021	Normal	-	0.63	0.02	-	0.27	8.25	-	0.63	-	4.72	0.1	<0.02	<0.02	0.26	1.14	<0.02	0.31
	11 Aug 2021	Normal	-	0.32	<0.02	-	0.04	0.52	-	0.37	-	2.15	<0.1	<0.02	<0.02	0.09	0.51	<0.02	0.06
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07 Feb 2022	Normal	-	0.44	<0.02	-	0.13	3.82	-	0.46	-	3.27	0.1	<0.02	<0.02	0.09	0.85	<0.02	0.19
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15 Aug 2022	Normal	-	0.26	<0.02	-	0.15	3.18	-	0.37	-	3.23	<0.1	<0.02	<0.02	0.08	0.35	<0.02	0.16
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Field_D	-	0.25	<0.02	-	0.14	3.09	-	0.39	-	3.48	<0.1	<0.02	<0.02	0.07	0.35	<0.02	0.16
	13 Feb 2023	Normal	-	0.60	<0.02	-	0.24	4.60	-	0.59	-	4.34	0.1	<0.02	<0.02	0.16	1.08	<0.02	0.28
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Aug 2023	Normal	-	1.03	<0.02	-	0.32	3.97	-	0.98	-	8.35	0.4	<0.02	<0.02	0.35	1.94	<0.02	0.52
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Feb 2024	Normal	-	0.21	<0.02	-	0.11	3.27	-	0.21	-	1.90	<0.1	<0.02	<0.02	0.07	0.35	<0.02	0.11
	12 Feb 2025	Normal	-	0.75	<0.02	-	0.40	7.90	-	0.66	-	6.28	0.2	<0.02	<0.02	0.24	1.70	<0.02	0.50
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2025	Normal	-	0.15	<0.02	-	0.07	1.82	-	0.16	-	1.58	<0.1	<0.02	<0.02	0.05	0.32	<0.02	0.11
SW020	12 Dec 2016	Normal	-	0.02	<0.01	-	-	0.48[#1]	-	-	-	0.20[#1]	<0.05	<0.01	<0.01	<0.01	0.04[#1]	<0.01	<0.01
		Field_D	-	0.15	<0.01	-	-	1.6[#1]	-	-	-	1.9[#1]	<0.05	<0.01	<0.01	0.02[#1]	0.23[#1]	<0.01	0.04[#1]
			-	0.18	<0.01	-	-	1.5[#1]	-	-	-	2.0[#1]	<0.05	<0.01	<0.01	0.02[#1]	0.23[#1]	<0.01	0.05[#1]
	16 Dec 2016	Normal	-	0.16	<0.01	-	-	1.0[#1]	-	-	-	2.1	<0.05	<0.01	<0.01	0.02[#1]	0.19[#1]	<0.01	0.05[#1]
	09 Feb 2017	Normal	-	0.03	<0.01	-	-	1.2[#1]	-	-	-	0.39[#1]	<0.05	<0.01	<0.01	<0.01	0.12[#1]	<0.01	0.03[#1]
	11 Feb 2020	Normal	-	0.04	<0.02	-	<0.02	0.35	-	0.04	-	0.39	<0.1	<0.02	<0.02	<0.02	0.05	<0.02	0.01
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Feb 2020	Normal	-	0.12	<0.02	-	0.03	0.89	-	0.11	-	1.16	<0.1	<0.02	<0.02	<0.02	0.13	<0.02	0.03
	20 May 2020	Normal	-	0.11	<0.02	-	0.06	1.47	-	0.14	-	1.40	<0.1	<0.02	<0.02	0.02	0.16	<0.02	0.11
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Interlab_D	<0.01	0.071	<0.01	-	0.024	0.82	-	0.075	<0.01	1.1	<0.05	<0.01	<0.01	0.011	0.10	<0.01	0.064
	14 Jul 2020	Normal	-	<0.02	<0.02	-	<0.02	0.48	-	0.02	-	0.31	<0.1	<0.02	<0.02	<0.02	0.05	<0.02	0.01
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Aug 2020	Normal	-	0.11	<0.02	-	0.04	0.78	-	0.14	-	1.24	<0.1	<0.02	<0.02	<0.02	0.14	<0.02	0.03
	02 Nov 2020	Normal	-	0.07	<0.02	-	0.02	0.75	-	0.06	-	0.71	<0.1	<0.02	<0.02	<0.02	0.09	<0.02	0.02
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	09 Feb 2021	Normal	-	0.14	<0.02	-	0.04	1.13	-	0.13	-	1.15	<0.1	<0.02	<0.02	<0.02	0.15	<0.02	0.03
	11 Aug 2021	Normal	-	0.15	<0.02	-	0.07	1.34	-	0.19	-	1.95	<0.1	<0.02	<0.02	0.03	0.23	<0.02	0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Feb 2022	Normal	-	0.12	<0.02	-	0.04	0.99	-	0.13	-	1.36	<0.1	<0.02	<0.02	<0.02	0.22	<0.02	0.04
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15 Aug 2022	Normal	-	0.13	<0.02	-	0.05	0.90	-	0.18	-	1.23	<0.1	<0.02	<0.02	0.02	0.18	<0.02	0.04
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Interlab_D	-	0.13	<0.02	-	0.04	0.77	-	0.13	-	1.2	<0.02	<0.02	<0.05	0.02	0.17	<0.01	0.03
	14 Feb 2023	Normal	-	0.09	<0.02	-	0.02	0.78	-	0.10	-	0.94	<0.1	<0.02	<0.02	<0.02	0.11	<0.02	0.03

			boxylic Acids						PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
			Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluorooctadecanoic acid (PFODA)	Perfluoro-n-hexadecanoic acid (PFHxDA)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (PFOSA)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			0.01	0.01	0.01	0.01	0.05	0.02	0.02	0.01	0.05	0.02	0.01	0.05	0.01	0.01	0.01	0.01	0.01
PFAS NEMP 3.0 2025 Freshwater 99%																			
PFAS NEMP 3.0 2025 Recreational water quality																			
Location Code	**Date**	**Sample Type**																	
	14 Jul 2020	Normal	0.04	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Aug 2020	Normal	0.08	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	02 Nov 2020	Normal	0.30	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11 Feb 2021	Normal	0.21	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	11 Aug 2021	Normal	0.12	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07 Feb 2022	Normal	0.18	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15 Aug 2022	Normal	0.06	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Field_D	0.06	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	13 Feb 2023	Normal	0.22	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Aug 2023	Normal	0.49	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14 Feb 2024	Normal	0.09	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	12 Feb 2025	Normal	0.29	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2025	Normal	0.08	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
SW020	12 Dec 2016	Normal	<0.01	<0.01	<0.01	<0.01	-	-	<0.05	-	-	<0.05	-	-	<0.05	<0.01	<0.05	<0.01	-
		Field_D	0.03[#1]	<0.01	<0.01	<0.01	-	-	<0.05	-	-	<0.05	-	-	<0.05	<0.01	<0.05	<0.01	-
			0.03[#1]	<0.01	<0.01	<0.01	-	-	<0.05	-	-	<0.05	-	-	<0.05	<0.01	<0.05	<0.01	-
	16 Dec 2016	Normal	0.03[#1]	<0.01	<0.01	<0.01	-	-	<0.05	-	-	<0.05	-	-	<0.05	<0.01	<0.05	<0.01	-
	09 Feb 2017	Normal	0.02[#1]	<0.01	<0.01	<0.01	-	-	-	<0.05	-	-	<0.05	-	<0.05	<0.01	<0.05	<0.01	-
	11 Feb 2020	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Feb 2020	Normal	0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	20 May 2020	Normal	0.03	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Interlab_D	<0.02	<0.02	<0.02	<0.01	<0.05	<0.02	<0.02	<0.01	<0.05	<0.02	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01
	14 Jul 2020	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26 Aug 2020	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	02 Nov 2020	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	09 Feb 2021	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	11 Aug 2021	Normal	0.04	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	08 Feb 2022	Normal	0.03	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15 Aug 2022	Normal	0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Interlab_D	0.03	<0.5	<0.1	<0.02	-	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
	14 Feb 2023	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05

			PFAS - Sums					PFAS
			PFAS (Sum of Total)	PFAS (Sum of Total)(WA DER List)	Sum of US EPA PFAS (PFOS + PFOA)*	Sum of PFHxS and PFOS	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	8:2 Polyfluoroalkyl phosphate diester (8:2 diPAP)
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			0.01	0.01	0.01	0.01	0.01	0.02
PFAS NEMP 3.0 2025 Freshwater 99%								
PFAS NEMP 3.0 2025 Recreational water quality						2		
Location Code	**Date**	**Sample Type**						
	14 Jul 2020	Normal	1.63	1.55	-	1.27	-	-
			-	-	-	-	-	-
	26 Aug 2020	Normal	4.10	3.74	-	2.96	-	-
	02 Nov 2020	Normal	14.4	13.5	-	10.2	-	-
			-	-	-	-	-	-
	11 Feb 2021	Normal	16.5	15.6	-	13.0	-	-
	11 Aug 2021	Normal	4.23	3.82	-	2.67	-	-
			-	-	-	-	-	-
	07 Feb 2022	Normal	9.53	8.94	-	7.09	-	-
			-	-	-	-	-	-
	15 Aug 2022	Normal	7.84	7.32	-	6.41	-	-
			-	-	-	-	-	-
		Field_D	7.99	7.46	-	6.57	-	-
	13 Feb 2023	Normal	12.2	11.4	-	8.94	-	-
			-	-	-	-	-	-
	16 Aug 2023	Normal	18.4	17.0	-	12.3	-	-
			-	-	-	-	-	-
	14 Feb 2024	Normal	6.32	6.00	-	5.17	-	-
	12 Feb 2025	Normal	19.3	17.9	-	14.2	-	-
			-	-	-	-	-	-
	28 Aug 2025	Normal	4.41	4.11	-	3.40	-	-
SW020	12 Dec 2016	Normal	-	-	-	0.68	-	-
		Field_D	-	-	-	3.5	-	-
			-	-	-	3.5	-	-
	16 Dec 2016	Normal	-	-	-	3.1	-	-
	09 Feb 2017	Normal	-	-	-	1.59	-	-
	11 Feb 2020	Normal	0.88	0.84	-	0.74	-	-
			-	-	-	-	-	-
	26 Feb 2020	Normal	2.49	2.35	-	2.05	-	-
	20 May 2020	Normal	3.50	3.30	-	2.87	-	-
			-	-	-	-	-	-
		Interlab_D	-	-	-	1.92	-	<0.02
	14 Jul 2020	Normal	0.87	0.85	-	0.79	-	-
			-	-	-	-	-	-
	26 Aug 2020	Normal	2.48	2.30	-	2.02	-	-
	02 Nov 2020	Normal	1.72	1.64	-	1.46	-	-
			-	-	-	-	-	-
	09 Feb 2021	Normal	2.77	2.60	-	2.28	-	-
	11 Aug 2021	Normal	4.05	3.79	-	3.29	-	-
			-	-	-	-	-	-
	08 Feb 2022	Normal	2.93	2.76	-	2.35	-	-
			-	-	-	-	-	-
	15 Aug 2022	Normal	2.75	2.52	-	2.13	-	-
			-	-	-	-	-	-
		Interlab_D	2.5	-	0.80	2.0	-	-
	14 Feb 2023	Normal	2.07	1.95	-	1.72	-	-

			PFAS - Unsaturated Fluorotelomer Acids	PFAS - Perfluoroalkyl Sulfonic Acids									PFAS - Perfluoroalkyl Carb						
			FOUEA (2H-Perfluoro-2-decenoic acid (8:2))	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorononanesulfonic acid (PFNS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluorooctanoic acid (PFOA)
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01		0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01
PFAS NEMP 3.0 2025 Freshwater 99%								0.00023											19
PFAS NEMP 3.0 2025 Recreational water quality								2				2							10
Location Code	**Date**	**Sample Type**																	
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Aug 2023	Normal	-	0.10	<0.02	-	0.05	1.63	-	0.11	-	1.55	<0.1	<0.02	<0.02	0.02	0.20	<0.02	0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Feb 2024	Normal	-	0.12	<0.02	-	0.04	1.06	-	0.13	-	1.25	<0.1	<0.02	<0.02	<0.02	0.19	<0.02	0.04
	11 Feb 2025	Normal	-	0.09	<0.02	-	0.03	0.97	-	0.08	-	1.02	<0.1	<0.02	<0.02	<0.02	0.16	<0.02	0.03
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2025	Normal	-	0.06	<0.02	-	0.02	0.66	-	0.08	-	0.76	<0.1	<0.02	<0.02	<0.02	0.10	<0.02	0.02
SW049	06 May 2016	Normal	-	<0.01	<0.01	-	-	0.07[#2]	-	-	-	0.06[#2]	<0.05	<0.01	<0.01	0.01	0.03[#2]	<0.01	0.02[#2]
	12 Feb 2025	Normal	-	0.06	<0.02	-	<0.02	0.81	-	0.04	-	0.46	<0.1	<0.02	<0.02	<0.02	0.12	<0.02	0.02
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04 Jul 2025	Normal	-	0.05	<0.02	-	<0.02	0.61	-	0.05	-	0.47	<0.1	<0.02	<0.02	<0.02	0.08	<0.02	0.02
	28 Aug 2025	Normal	-	0.14	<0.02	-	0.06	1.45	-	0.22	-	1.50	<0.1	<0.02	<0.02	0.04	0.30	<0.02	0.08
SW106	10 Oct 2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Feb 2025	Normal	-	0.44	<0.02	-	0.19	5.13	-	0.38	-	4.40	0.2	<0.02	<0.02	0.17	1.16	<0.02	0.24
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2025	Normal	-	0.34	<0.02	-	0.24	11.4	-	0.41	-	3.89	<0.1	<0.02	<0.02	0.10	0.70	<0.02	0.24
SW123	11 Feb 2025	Normal	-	<0.02	<0.02	-	<0.02	<0.01	-	<0.02	-	<0.01	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Field_D	-	<0.02	<0.02	-	<0.02	<0.01	-	<0.02	-	<0.01	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
		Interlab_D	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	28 Aug 2025	Normal	-	<0.02	<0.02	-	<0.02	0.01	-	<0.02	-	0.03	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
SW124	12 Feb 2025	Normal	-	0.29	<0.02	-	0.08	2.40	-	0.28	-	2.20	<0.1	<0.02	<0.02	0.05	0.52	<0.02	0.09
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2025	Normal	-	1.16	<0.02	-	0.26	4.68	-	1.54	-	9.01	0.1	<0.02	<0.02	0.22	2.23	<0.02	0.42
		Field_D	-	1.20	<0.02	-	0.30	6.04	-	1.77	-	9.20	0.1	<0.02	<0.02	0.25	2.25	<0.02	0.43
		Interlab_D	-	1.4[#1]	<0.01	0.02[#1]	0.40[#1]	8.6[#1]	0.43	1.6[#1]	-	10[#1]	0.13	<0.01	<0.01	0.30[#1]	1.9	<0.01	0.40[#1]
Statistics																			
Number of Results			9	306	306	3	248	306	3	248	9	306	306	306	306	306	306	306	306
Number of Detects			0	236	11	2	168	283	2	191	0	276	50	4	1	187	246	10	233
Minimum Concentration			<0.01	<0.01	0.01	0.01	<0.01	0.01	<0.01	<0.01	<0.01	0.01	<0.02	0.01	<0.01	0.01	0.01	0.01	0.01
Minimum Detect			ND	0.019	0.01	0.01	0.015	0.01	0.05	0.016	ND	0.01	0.04	0.01	0.04	0.01	0.01	0.01	0.01
Maximum Concentration			<0.01	1.66	0.08	0.02	0.4	25.4	0.43	1.77	<0.01	10	0.4	0.02	<0.05	0.46	6.8	0.05	0.52
Maximum Detect			ND	1.66	0.08	0.02	0.4	25.4	0.43	1.77	ND	10	0.4	0.02	0.04	0.46	6.8	0.05	0.52
Average Concentration *			0.005	0.17	0.0098	0.012	0.066	2.2	0.16	0.18	0.005	1.5	0.058	0.0089	0.0094	0.048	0.37	0.009	0.078
Geometric Average *			0.005	0.075	0.0089	0.01	0.035	0.61	0.048	0.079	0.005	0.5	0.049	0.0086	0.0088	0.026	0.14	0.0085	0.036
Median Concentration *			0.005	0.12	0.01	0.01	0.04	1.105	0.05	0.12	0.005	1	0.05	0.01	0.01	0.03	0.23	0.01	0.05
Standard Deviation *			0	0.22	0.007	0.0076	0.08	3.5	0.23	0.26	0	1.7	0.048	0.0024	0.004	0.064	0.59	0.0036	0.1
Geometric Standard Deviation *			1	4.3	1.5	2	3.2	8.5	9.3	4.3	1	7.6	1.7	1.4	1.4	3	5.5	1.4	3.9
95% UCL (Student's-t) *			0.005	0.189	0.0105	0.0245	0.0749	2.535	0.555	0.211	0.005	1.625	0.0625	0.00916	0.00977	0.0545	0.429	0.00936	0.0875
Number of Env Standard Exceedances			0	0	0	0	0	306	0	0	0	71	0	0	0	0	0	0	0
Number of Env Standard Exceedances (Detects Only)			0	0	0	0	0	283	0	0	0	71	0	0	0	0	0	0	0
% of Detects			0	77	4	67	68	92	67	77	0	90	16	1	0	61	80	3	76
% of Non-Detects			100	23	96	33	32	8	33	23	100	10	84	99	100	39	20	97	24
% of Detects at or above Env Standards			0	0	0	0	0	92	0	0	0	23	0	0	0	0	0	0	0
% of Results Below Env Standards or Non-Detect			100	100	100	100	100	8	100	100	100	77	100	100	100	100	100	100	100

			boxylic Acids						PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
			Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluorooctadecanoic acid (PFODA)	Perfluoro-n-hexadecanoic acid (PFHxDA)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (PFOSA)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			0.01	0.01	0.01	0.01	0.05	0.02	0.02	0.01	0.05	0.02	0.01	0.05	0.01	0.01	0.01	0.01	0.01
PFAS NEMP 3.0 2025 Freshwater 99%																			
PFAS NEMP 3.0 2025 Recreational water quality																			
Location Code	**Date**	**Sample Type**																	
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16 Aug 2023	Normal	0.03	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13 Feb 2024	Normal	0.03	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	11 Feb 2025	Normal	0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2025	Normal	0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
SW049	06 May 2016	Normal	0.02	<0.01	<0.01	<0.01	-	-	<0.05	-	-	<0.05	-	-	<0.05	<0.01	<0.05	<0.01	-
	12 Feb 2025	Normal	0.05	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04 Jul 2025	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	28 Aug 2025	Normal	0.04	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
SW106	10 Oct 2022	Normal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12 Feb 2025	Normal	0.44	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2025	Normal	0.15	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
SW123	11 Feb 2025	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Field_D	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		Interlab_D	<0.01	<0.01	<0.01	<0.01	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
	28 Aug 2025	Normal	<0.02	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
SW124	12 Feb 2025	Normal	0.07	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28 Aug 2025	Normal	0.28	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		Field_D	0.32	<0.05	<0.02	<0.02	-	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		Interlab_D	0.24	<0.01	<0.01	<0.01	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Statistics																			
Number of Results			306	306	306	306	9	9	288	266	248	288	266	248	306	306	306	306	248
Number of Detects			210	0	0	1	0	0	0	0	0	0	0	0	2	0	30	6	0
Minimum Concentration			0.01	<0.01	<0.01	<0.01	<0.05	<0.02	<0.02	<0.01	<0.05	<0.02	<0.01	<0.05	<0.01	<0.01	0.01	0.01	<0.01
Minimum Detect			0.01	ND	ND	0.05	ND	ND	ND	ND	ND	ND	ND	ND	0.02	ND	0.01	0.01	ND
Maximum Concentration			1.4	<0.5	<0.1	0.05	<0.05	<0.02	<0.1	<0.05	<0.5	<0.05	<0.05	<0.05	<0.1	<0.05	21	0.08	<0.05
Maximum Detect			1.4	ND	ND	0.05	ND	ND	ND	ND	ND	ND	ND	ND	0.02	ND	21	0.08	ND
Average Concentration *			0.083	0.028	0.01	0.0089	0.025	0.01	0.025	0.011	0.034	0.025	0.011	0.025	0.014	0.02	0.18	0.02	0.023
Geometric Average *			0.04	0.019	0.0091	0.0085	0.025	0.01	0.025	0.011	0.027	0.024	0.011	0.025	0.013	0.016	0.029	0.017	0.022
Median Concentration *			0.04	0.025	0.01	0.01	0.025	0.01	0.025	0.01	0.025	0.025	0.01	0.025	0.01	0.025	0.025	0.025	0.025
Standard Deviation *			0.13	0.042	0.0076	0.0032	0	0	0.0054	0.0045	0.044	0.0026	0.0045	0	0.0091	0.0089	1.4	0.0094	0.0056
Geometric Standard Deviation *			3.5	2.3	1.5	1.4	1	1	1.2	1.4	1.6	1.2	1.4	1	1.6	2.1	2.7	2	1.5
95% UCL (Student's-t) *			0.0947	0.0316	0.011	0.00924	0.025	0.01	0.0259	0.0117	0.0387	0.0248	0.0117	0.025	0.0153	0.0204	0.313	0.0211	0.0237
Number of Env Standard Exceedances			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Env Standard Exceedances (Detects Only)			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Detects			69	0	0	0	0	0	0	0	0	0	0	0	1	0	10	2	0
% of Non-Detects			31	100	100	100	100	100	100	100	100	100	100	100	99	100	90	98	100
% of Detects at or above Env Standards			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Results Below Env Standards or Non-Detect			100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

			PFAS - Sums					PFAS
			PFAS (Sum of Total)	PFAS (Sum of Total)(WA DER List)	Sum of US EPA PFAS (PFOS + PFOA)*	Sum of PFHxS and PFOS	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	8:2 Polyfluoroalkyl phosphate diester (8:2 diPAP)
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			0.01	0.01	0.01	0.01	0.01	0.02
PFAS NEMP 3.0 2025 Freshwater 99%								
PFAS NEMP 3.0 2025 Recreational water quality						2		
Location Code	**Date**	**Sample Type**						
			-	-	-	-	-	-
	16 Aug 2023	Normal	3.74	3.58	-	3.18	-	-
			-	-	-	-	-	-
	13 Feb 2024	Normal	2.86	2.69	-	2.31	-	-
	11 Feb 2025	Normal	2.43	2.29	-	1.99	-	-
			-	-	-	-	-	-
	28 Aug 2025	Normal	1.74	1.62	-	1.42	-	-
SW049	06 May 2016	Normal	-	-	-	0.13	-	-
	12 Feb 2025	Normal	1.58	1.52	-	1.27	-	-
			-	-	-	-	-	-
	04 Jul 2025	Normal	1.28	1.23	-	1.08	-	-
	28 Aug 2025	Normal	3.89	3.55	-	2.95	-	-
SW106	10 Oct 2022	Normal	-	-	-	-	-	-
			-	-	-	-	-	-
	12 Feb 2025	Normal	13.0	12.2	-	9.53	-	-
			-	-	-	-	-	-
	28 Aug 2025	Normal	17.7	16.8	-	15.3	-	-
SW123	11 Feb 2025	Normal	<0.01	<0.01	-	<0.01	-	-
			-	-	-	-	-	-
		Field_D	<0.01	<0.01	-	<0.01	-	-
		Interlab_D	<0.1	<0.05	<0.01	<0.01	<0.01	-
	28 Aug 2025	Normal	0.04	0.04	-	0.04	-	-
SW124	12 Feb 2025	Normal	6.13	5.62	-	4.60	-	-
			-	-	-	-	-	-
	28 Aug 2025	Normal	20.4	18.1	-	13.7	-	-
		Field_D	22.3	19.8	-	15.2	-	-
		Interlab_D	25	22.97	-	18.6	-	-
Statistics								
Number of Results			235	225	11	306	1	9
Number of Detects			218	208	10	284	0	0
Minimum Concentration			0.01	0.01	0.01	0.01	<0.01	<0.02
Minimum Detect			0.01	0.01	0.01	0.01	ND	ND
Maximum Concentration			38	37	13	34.4	<0.01	<0.02
Maximum Detect			38	37	13	34.4	ND	ND
Average Concentration *			4.7	4.5	2.2	3.7		0.01
Geometric Average *			1.4	1.3	0.33	1.1	0.005	0.01
Median Concentration *			2.93	2.8	0.8	2.39	0.005	0.01
Standard Deviation *			5.9	5.6	3.8	4.9		0
Geometric Standard Deviation *			9.9	9.8	15	9.2		1
95% UCL (Student's-t) *			5.367	5.083	4.309	4.129		0.01
Number of Env Standard Exceedances			0	0	0	167	0	0
Number of Env Standard Exceedances (Detects Only)			0	0	0	167	0	0
% of Detects			93	92	91	93	0	0
% of Non-Detects			7	8	9	7	100	100
% of Detects at or above Env Standards			0	0	0	55	0	0
% of Results Below Env Standards or Non-Detect			100	100	100	45	100	100

	PFAS - Unsaturated Fluorotelomer Acids	PFAS - Perfluoroalkyl Sulfonic Acids									PFAS - Perfluoroalkyl Carb						
	FOUEA (2H-Perfluoro-2-decenoic acid (8:2))	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorononanesulfonic acid (PFNS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluorooctanoic acid (PFOA)
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01		0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01
PFAS NEMP 3.0 2025 Freshwater 99%						0.00023											19
PFAS NEMP 3.0 2025 Recreational water quality						2				2							10

Location Code **Date** **Sample Type**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Quantification of linear and branched isomers has been conducted as a single total response using the relative response factor for the corresponding linear/branched standard.
#2 Quantification of linear and branched isomers has been conducted as a single total response using the relative response factor for the corresponding linear standard.

Environmental Standards

HEPA, March 2025, PFAS NEMP 3.0 2025 Freshwater 99%
HEPA, March 2025, PFAS NEMP 3.0 2025 Recreational water quality

	boxylic Acids						PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluorooctadecanoic acid (PFODA)	Perfluoro-n-hexadecanoic acid (PFHxDA)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (PFOSA)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL	0.01	0.01	0.01	0.01	0.05	0.02	0.02	0.01	0.05	0.02	0.01	0.05	0.01	0.01	0.01	0.01	0.01
PFAS NEMP 3.0 2025 Freshwater 99%																	
PFAS NEMP 3.0 2025 Recreational water quality																	

Location Code **Date** **Sample Type**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Quantification of linear and branched isomers has been conducted as a single to
#2 Quantification of linear and branched isomers has been conducted as a single to

Environmental Standards

HEPA, March 2025, PFAS NEMP 3.0 2025 Freshwater 99%
HEPA, March 2025, PFAS NEMP 3.0 2025 Recreational water quality

	PFAS - Sums					PFAS
	PFAS (Sum of Total)	PFAS (Sum of Total)(WA DER List)	Sum of US EPA PFAS (PFOS + PFOA)*	Sum of PFHxS and PFOS	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	8:2 Polyfluoroalkyl phosphate diester (8:2 diPAP)
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL	0.01	0.01	0.01	0.01	0.01	0.02
PFAS NEMP 3.0 2025 Freshwater 99%						
PFAS NEMP 3.0 2025 Recreational water quality				2		

Location Code **Date** **Sample Type**

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Quantification of linear and branched isomers has been conducted as a single to
#2 Quantification of linear and branched isomers has been conducted as a single to

Environmental Standards

HEPA, March 2025, PFAS NEMP 3.0 2025 Freshwater 99%
HEPA, March 2025, PFAS NEMP 3.0 2025 Recreational water quality

Appendix C

Data validation

QA/QC Data Validation Report

Two primary decision error-types may occur due to uncertainties or limitations in the project data set. These are:

– Type (a) Error: An investigation area may be deemed to pose no unacceptable risk, when in fact it does. This may occur if contamination is 'missed' due to limitations in the sampling plan, or if the project analytical data set is unreliable.
– Type (b) Error: An investigation area may be deemed to pose an unacceptable risk, when in fact it does not. This may occur if the project analytical data set is unreliable, due to inappropriate sampling, sample handling, or analytical procedures. An assessment will be made as to the likelihood of a decision error being made based on the results of a QA/QC assessment and the closeness of the data to assessment criteria. Additionally, statistical methods can be utilised, where applicable, such as 95% upper confidence limit calculations.

To minimise the potential for decision errors, data quality indicators (DQIs) for completeness, comparability, representativeness, precision and accuracy have been used.

C-1 Data Quality Indicators

Data generated during this investigation must be appropriate to allow decisions to be made with confidence. Specific limits for this investigation have been adopted in accordance with guidance from the AS4482.1 which includes appropriate indicators of data quality (data quality indicators [DQIs] used to assess QA/QC, and GHD's Standard Field Operating Procedures).

To assess the usability of the data prior to making decisions, the data is assessed against pre-determined DQIs. The DQIs including precision, accuracy, representativeness, comparability and completeness, will be reviewed at the completion of the investigation works to assess for the presence of decision errors.

The pre-determined DQIs established for the investigation are discussed below and shown in Table C1.

– Precision - measures the reproducibility of measurements under a given set of conditions. The precision of the laboratory data and sampling techniques is assessed by calculating the Relative Percentage Difference (RPD) of duplicate samples.
– The relative percentage differences (RPDs) are to be calculated for all primary and field duplicate pairs and will be considered acceptable based on the following RPD limits:
    - 200% for concentrations within 1 to 10 times the analyte LOR.
    - 50% for concentrations within 10 to 30 times the analyte LOR.
    - 30% for concentrations greater than 30 times the analyte LOR.
– Accuracy - measures the bias in a measurement system. The accuracy of the laboratory data that is generated during this investigation is a measure of the closeness of the analytical results obtained by a method to the 'true' (or standard) value. Accuracy is assessed by reference to the analytical results of laboratory control samples, laboratory spikes and analyses against reference standards. The nominal "acceptance limits" on laboratory control samples are defined in Table C1.
– Representativeness - expresses the degree to which sample data accurately and precisely represent a characteristic of a population or an environmental condition. Representativeness is achieved by collecting samples on a representative basis across the site, and by using an adequate number of sample locations to characterise the site to the required accuracy.
– Comparability - expresses the confidence with which one data set can be compared with another. This is achieved through maintaining a level of consistency in techniques used to collect samples; ensuring analysing laboratories use consistent analysis techniques and reporting methods.
– Completeness - is defined as the percentage of measurements made which are judged to be valid measurements.

Table C1 Summary of quality assurance / quality control criteria (as applicable)- all media

Data quality indicator	Frequency	Data quality acceptance criteria
Precision		
Blind and split duplicates	1 / 10 samples (combined)	200% for concentrations within 1 to 10 times the analyte LOR
		50% for concentrations within 10 to 30 times the analyte LOR
		30% for concentrations greater than 30 times the analyte LOR
Transport blank	1 per batch	<LOR
Transport spike	-	-
Accuracy		
Surrogate spikes (laboratory)	All organic samples	70-130%
Laboratory control samples	1 per lab batch	<LOR
Matrix spikes	1 per lab batch	70-130
Rinsate blanks	1/equipment/day	<LOR
Representativeness		
Sampling appropriate for media and analytes	All samples	-
Samples extracted and analysed within holding times	All samples	-
LORs appropriate and consistent[1]	All samples	All samples
Comparability		
Consistent field conditions, sampling staff and laboratory analysis	All samples	All samples
Standard operating procedures for sample collection & handling	All samples	All samples
Standard analytical methods used for all analyses	All samples	All samples
Completeness		
Sample description and COCs completed and appropriate	All Samples	All Samples
Appropriate documentation	All Samples	All Samples
Satisfactory frequency and result for QA/QC samples	All QA/QC samples	-
Data from critical samples is considered valid	-	Critical samples valid

Acronyms
COC: Chain of Custody
LOR: Limit of Reporting
QA/QC: Quality assurance / quality control

[1] The 99% species protection level has been applied for high value conservation systems. This approach is generally adopted for chemicals that bioaccumulate and biomagnify in wildlife. It is proposed that the laboratory LOR is adopted for the purposes of preliminary screening of analytical water results, rather than sole use of the criteria value.

If any of the DQIs are not met, further investigation will be necessary to determine whether the non-conformance will significantly affect the usefulness of the data.

C-1-1 Field quality assurance and quality control

The quality assurance/quality control (QA/QC) procedures are based on NEPM Schedule B2 (2013).

QA involves all the actions, procedures, checks and decisions, undertaken to ensure the representativeness and integrity of samples and accuracy and reliability of analytical results (NEPC 2013). QC involves protocols to monitor and measure the effectiveness of QA procedures.

All fieldwork was conducted with reference to Australian Standards and GHD's Standard Field Operating Procedures which ensure all samples are collected by a set of uniform and systematic methods, as required by GHD's QA system. Key requirements of these procedures are listed below:

– Decontamination procedures – including washing and rinsing of re-useable equipment, the use of new disposable gloves and the use of sampling containers provided by the laboratory.
– Sample identification procedures - samples were immediately transferred to sample containers of appropriate composition and preservation for the required laboratory analysis. All sample containers were clearly labelled with a sample number, job number, and sample date. The sample containers were then transferred to a chilled insulated container for sample preservation prior to and during shipment to the analytical laboratory.
– Chain of custody information requirements - a chain of custody form was completed and forwarded to the testing laboratory with the samples.
– Blind/split duplicate and blank sample frequency – refer to assessment below.
– Calibration of measuring equipment was carried out prior to the sampling event, the calibration certificate and field check prior to use is provided in Appendix D.

C-1-2 Sampling and analysis quality control

The QC samples collected during the investigation are described below.

– Blind duplicate/Intra-laboratory duplicate: Blind replicates are used to identify the variation in the analyte concentration between samples from the same sampling point and the repeatability of the laboratory's analysis.
– Split duplicate/Inter-laboratory duplicate: Split samples provide an indication of the repeatability of the results between laboratories.
– Trip blanks: Trip blank samples are used to estimate the amount of contamination introduced during the transport and storage of samples from the time of sampling to the time of analysis. Trip blanks were analysed for PFAS.

C-1-3 Field QA/QC samples

Relative percentage difference (RPD) calculations are used to assess how closely primary and inter/intra duplicate sample results match. RPDs are a quantitative measure of the accuracy of the analytical results and are calculated in accordance with the procedure described in *AS 4482.1 – 2005* (Standards Australia 2005).

GHD has adopted the RPD range as summarised in Section C-1. However, it is noted that this will not always be achieved, particularly at low analyte concentrations. Where a result is below the laboratory limit of reporting (LOR) for one of the paired samples, the concentration assigned to that sample is the LOR. Where both results are reported below laboratory LOR the RPD is not calculated.

The RPD was calculated for each duplicate pair, and presented in Table C4 following this assessment, and exceedances of the RPD acceptance criteria are summarised in Table C2.

Table C2 Duplicate pairs RPD exceedances

Media	Duplicate type	Primary sample ID	Duplicate sample ID	RPD exceedances (%)	
Surface water	Inter-laboratory	0026_SW007_250828	0026_QC200_250828	55	PFOS
		0026_SW124_250828	0026_QC201_250828	42	Perfluoroheptane sulfonic acid (PFHpS)
				59	PFOS

C-2 Laboratory quality assurance / quality control

Laboratory methods used by the primary laboratory were suitable for environmental contaminant analysis and are based on established internationally recognised procedures such as those published by the United States Environmental Protection Agency (US EPA), American Public Health Association (APHA), AS and National Environment Protection (Assessment of Site Contamination) Measure (NEPM).

The individual testing laboratory conducted an assessment of the laboratory QC program however the results were also independently reviewed and assessed internally by GHD. Recovery targets below are defined in the Eurofins/ALS QA/QC section of the certificates of analysis reports. All laboratory QA/QC results are documented with the laboratory certificates of analysis provided in Appendix E.

C-2-1 Laboratory quality control procedures

Laboratory QC samples incorporated in the analytical process include:

Laboratory blind duplicate samples

A laboratory blind duplicate provides data on the analytical precision and reproducibility of the analytical result. The laboratory blind duplicate is created by sub sampling from one of the primary samples submitted for analysis. Laboratory blind duplicates are analysed at a rate equivalent to one in twenty samples per analytical batch, or one sample per batch if less than twenty samples are analysed in a batch.

The permitted ranges for the RPD of laboratory blind duplicates are dependent on the magnitude of the results in comparison to the level of reporting as shown in Table C3.

Table C3 Permitted laboratory blind duplicate relative percentage difference (RPD) ranges

Magnitude of result	Permitted RPD range
< 10 x limit of reporting (LOR)	No limits
10 – 20 x LOR	0% - 50%
> 20 x LOR	0% - 20%

Matrix spike recoveries

Matrix spike sample analysis is the analysis of one or more replicate portions of samples from the batch, after fortifying the additional portion(s) with known quantities of the analyte(s) of interest. The percentage recovery of target analyte(s) from matrix spike samples is used to determine the bias of the method in the specific sample matrix. Recoveries must lie between 70% and 130%.

Laboratory control sample

The laboratory control sample (LCS) analysis of either a reference material or a control matrix fortified with analytes representative of the analyte class. The purpose of LCS is to monitor method precision and accuracy independent of the sample matrix. Typically, the percentage recovery of the LCS is compared to the dynamic recovery limit based on the statistical analysis of the processed LCS analysis.

Surrogate spike recoveries

Surrogate Spikes provide a means of checking that no gross errors have occurred during any stage of the analytical method leading to significant analyte loss. Surrogate recoveries are similar to the analyte of interest in terms of chemical composition, extractability, and chromatographic conditions (retention time), but which are not normally found in environmental samples. Surrogate compounds are spiked into blanks, standards and samples submitted for organic analyses by gas-chromatographic techniques prior to sample extraction. Recoveries must lie between 50% and 150% for PFAS and 20-130% for Phenols.

Method blank samples

Method or analysis blank sample analysis is the analysis of a sample that is as free as possible of the analytes of interest, but has been prepared in the same manner as the samples under investigation. The analysis is to ascertain if laboratory reagent, glassware and other laboratory consumables contribute to the observed concentration of analytes in the process batch. If below the maximum acceptable method blank (20% of the practical quantification limit), the contribution is subtracted from the gross analytical signal for each analysis before calculating the sample analyte concentration. The method blank should return analyte concentrations as 'not detected'.

The individual testing laboratory conducted an assessment of the laboratory QC program internally. However, the results were also independently reviewed and assessed by GHD.

C-3 QC Assessment

Primary laboratory and report number:	ALS: ES2527020
Secondary laboratory and report number:	Eurofins: 1263091

1. Field QA/QC sample collection	Assessment	Comments
Number of Primary Samples analysed	19 surface water samples	-
Number of Days Sampling	2	28/08/2025 and 29/08/2025
Intra-Laboratory Field Duplicates (1/10 samples)	2	0026_QC100_250828 and 0026_QC101_250828.
Inter-Laboratory Field Duplicates (1/10 samples)	2	0026_QC200_250828 and 0026_QC201_250828.
Trip Blanks (1/batch)	1	0026_QC500_250828.
Rinsate Blanks (1/equipment/day)	0	Not needed as no reusable equipment was used during sampling.
2. Sample Handling	**Assessment**	**Comments**
Were the sample holding times met?	Yes	-
Were the samples in proper custody between the field and reaching this laboratory?	Yes	-
Were the samples properly and adequately preserved?	Yes	-
Did the laboratory receive the samples in good condition?	Yes	-
3. Precision/Accuracy Assessment	**Assessment**	**Comments**
Was a NATA registered laboratory used?	Yes	-
Did the laboratory perform the requested tests?	Yes	-

Were the laboratory methods adopted NATA endorsed?	Yes	-
Were the reporting limits satisfactory?	Yes	It is noted that the PFOS LOR of 0.01 µg/L is greater than the adopted ecological screening criteria (0.00023 µg/L). As such, sample 0026_SW014_250828 was below the LOR but exceeded the screening criteria.
Was the NATA Seal on the reports?	Yes	-
Did an authorised person sign the reports?	Yes	-
4. Field Duplicates assessment	**Assessment**	**Comments**
Were an adequate number of intra and inter-laboratory field duplicates analysed?	Yes	The QA/QC target frequency was met.
Were RPDs within acceptance criteria?	No	All RPDs were within acceptance criteria except for 3 inter-laboratory exceedances, 2 for PFOS and 1 for PFHpS. Refer to Table C4 for all RPDs.
5. Trip Blanks	**Assessment**	**Comments**
Were an adequate number of trip blanks analysed?	Yes	The QA/QC target frequency was met.
Were the trip blanks free of contamination?	Yes	All trip blank concentrations were below the laboratory LOR, refer to Table C5 for full results.
6. Laboratory Internal Quality Control Procedures – Pass/fail	**Assessment**	**Comments**
Method Blanks	Pass	Within QA/QC control limits.
Matrix Spikes	Fail	Matrix spike recoveries were not determined for PFOS and PFHxS in sample 0026_SW005_250828, due to background levels being greater than or equal to 4 x spike level. All other matrix spike recoveries were within QA/QC control limits.
Laboratory Control Samples/Spikes	Pass	Within QA/QC control limits.
Laboratory Duplicates	Pass	Within QA/QC control limits.
Surrogates	Pass	Within QA/QC control limits.

C-3-1 QC Summary

QC parameters	Satisfactory	Partially Satisfactory	Unsatisfactory	Comments and DQI assessment
Field QA/QC sample collection	X			
Sample Handling	X			
Precision/ Accuracy assessment	X			
Field QA/QC assessment	X			
Laboratory Internal QA/QC		X		Matrix spike recoveries were not determined for PFOS and PFHxS in sample 0026_SW005_250828. It is noted that PFOS and

QC parameters	Satisfactory	Partially Satisfactory	Unsatisfactory	Comments and DQI assessment
				PFHxS concentrations from this sampling event are within historic ranges at 0026_SW005_250828. As such, this is not considered to have a material impact on the usability of the data.

Data Usability		Comments
Data Directly Usable	X	On balance of the above, the assessment data is considered adequate for the purposes of the OMP.
Data Usable with the following qualifications		
Data Not Usable		

QA/QC Report Prepared by:	Marcus Gaffney
QA/QC Report Checked by:	Helen Milne

Appendix D

Equipment calibration

WAMSCIENTIFIC
Your water and air monitoring equipment specialists

Certificate of Service and Calibration
Water Quality Meter
YSI Professional Plus

Company Name	WAM Scientific
Office Address	26 Bungarra Crescent, Chipping Norton NSW 2170
Phone Number	+61 405 241 484
Contact Name	William Pak
Instrument	YSI Pro Quatro Water Quality Meter w/ 1m Quatro Cable
Serial Number	23G103458
Client Name	Jarrad Mawbey (GHD Pty Ltd)
Project Number	12626622
Comments	Round 4 JBRF/RAN SSSS

Instrument Check

Item	Test	Test Passed	Comments
2 x Alkaline C-size Batteries	Klein Tools MM300 Multimeter	✓	Both batteries reading above 2.9V
Battery Saver Function	Operation	✓	Automatically turns off after 60 minutes if idle
Unit Display	Operation	✓	Screen visible, no damage
Keypad	Operation	✓	Responsive, no damage
Connection Port and Cable	Condition/Check	✓	Clean, no damage
Monitor Housing	Condition/Check	✓	No damage
Firmware	Version	✓	4.0.0
pH Probe	Condition/Calibration	✓	Calibrated and conforms to manufacturer's specs
pH millivolts for pH 7.00	Calibration	✓	pH 7.00 calibration range between 0 mV ± 50 mV
pH millivolts for pH 4.00	Calibration	✓	pH 4 mV range +165 to +180 from 7 buffer mV value
pH slope	Calibration	✓	Range between 55 to 60 mV/pH (ideal value 59 mV)
Response time < 90 seconds	Calibration	✓	Responds to correct value within 90 seconds
ORP Probe	Condition/Calibration	✓	Calibrated and conforms to manufacturer's specs
ORP Reading	Calibration	✓	Within ± 80 mV of reference Zobell Reading
Response time < 90 seconds	Calibration	✓	Responds to correct value within 90 seconds
Conductivity/Temp Probe	Condition/Calibration	✓	Calibrated and conforms to manufacturer's specs
Conductivity Cell	Calibration	✓	Conductivity cell constant 5.0 ± 1.0 in GLP file
Clean Sensor Readings	Calibration	✓	Clean sensor reads less than 3 uS/cm in dry air
Dissolved Oxygen Probe	Condition/Calibration	✓	Calibrated and conforms to manufacturer's specs
DO Cap	Condition/Calibration	✓	1.25 mil PE membrane (yellow membrane)
DO Sensor in Use	Condition	✓	Polarographic DO sensor
DO Sensor Value	Calibration	✓	(min 4.31 uA - max 8.00 uA) Avg 6.15 uA

Instrument Readings

Parameter	Standard Used	Reference No.	Calibration Value	Observed	Actual	Units
Temperature	Centre 370 Thermometer	Room Temp.	13.4	13.3	13.4	°C
pH	pH 4.00	417183	4.01	3.98	4.01	pH
pH	pH 7.00	419528	7.00	7.03	7.00	pH
ORP	Zobell A & B	420448/418958	254.5	269.4	254.5	mV
Conductivity	2760 µs/cm at 25°C	399819	2760	2807	2760	µs/cm
Zero Dissolved O_2	$NaSO_3$ in Distilled H_2O	426184	0.0	-0.5	0.0	%
100% Dissolved O_2	100% Air Saturated H_2O	Fresh Air	100.0	101.3	100.0	%

Declaration

WAM Scientific certifies that the above instrument was successfully tested according to manufacturer's standards and all necessary checks were conducted to ensure the instrument was fully operational prior to dispatch. The calibration data supplied was obtained in accordance with manufacturer's specifications using solutions of known values.

Calibrated By	William Pak
Calibration Date	20/08/2025
Calibration Due	20/02/2026

WAM Scientific:
26 Bungarra Crescent
CHIPPING NORTON NSW 2170
T: +61 405 241 484 | +61 424 198 667
E: rentals@wamscientific.com.au
E: accounts@wamscientific.com.au

Appendix E

Laboratory certificates

1263091

Mandatory Fields — CHAIN OF CUSTODY

Page 1 of 2

CoC #: (if applicable)

CLIENT CODE:	*PROJECT MANAGER: Helen Milne	SAMPLER: Lewis Roso	
*CLIENT: GHD Pty Ltd	*PM MOBILE: 0410 533 325	SAMPLER MOBILE: 439227076	
OFFICE: (Invoiced Office) Sydney	ALS QUOTE # (Client PL if blank) GHD Rates 2025	PURCHASE ORDER NO.: 12626622	
PROJECT NO./PROJECT: NSW_0026_PFASOMP_25 / HMAS Albatross OMP 2025		SITE: 0026	
*INVOICE TO (client default if nil)	accountspayableAU@ghd.com, adam schipp@ghd com	X CC Invoice to PM	BIOSECURITY
*EMAIL REPORTS TO (default to PM if blank)	lewis roso@ghd.com; jarrad mawbey@ghd.com; matthew.west@ghd com, helen milne@ghd com, esdat+ghd_au@esdatlabsync net		

***STORAGE REQUIREMENTS**
Please check box →
Standard Storage time from receipt of samples:
Waters - 3 weeks
Soils - 2 months

- [x] Standard Storage
- [ ] Extended Storage

Specify Disposal Date:

Note: Extended storage incurs a fee and requires a signed agreement.

***TURNAROUND**
Please check box →
(Not all tests can be expedited, contact Client Services for more information)

- [x] 5+ days (no surcharge)
- [ ] 3 day (+15%)
- [ ] 2 day (+30%)
- [ ] 1 day (+50%)

***ANALYSIS REQUIRED**
(NB. ALS Quote No and/or Analysis Suite Codes must be listed to attract suite/quoted price)
Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required)
Mark an X in the boxes below analysis to indicate the parameter listed above to be tested on that sample.

Environmental Division
Sydney
Work Order Reference
ES2527020

Telephone : + 61-2-8784 8555

Comments:

ALS Use Only Lab ID	Sample ID	Depth	Date/Time	No. Bottles	MATRIX: Soil/Solid(S) Water(W) Sediments (SD), Dust (D), Product (P), Biota (B), Biosolids (BS)	EP231X (PFAS - Full Suite (30 analytes))	HOLD	Forward to Eurofins	Lab QC Dup	Lab QC MS	Additional Information (Comment on hazards - e.g., asbestos, known high contamination)
1	0026_SW007_250828	2	28 Aug 2025		W	X			☐	☐	
2	0026_SW018_250828	4	28 Aug 2025		W	X			X	X	Extra sample for lab QC
3	0026_SW009_250828	2	28 Aug 2025		W	X			☐	☐	
4	0026_SW012_250828	2	28 Aug 2025		W	X			☐	☐	
5	0026_SW106_250828	2	28 Aug 2025		W	X			☐	☐	
6	0026_SW123_250828	2	28 Aug 2025		W	X			☐	☐	
7	0026_SW005_250828	4	28 Aug 2025		W	X			X	X	Extra sample for lab QC
8	0026_SW006_250828	2	28 Aug 2025		W	X			☐	☐	
9	0026_SW020_250828	2	28 Aug 2025		W	X			☐	☐	
10	0026_SW124_250828	2	28 Aug 2025		W	X			☐	☐	
11	0026_SW187_250828	2	28 Aug 2025		W	X			☐	☐	
12	0026_SW002_250828	2	28 Aug 2025		W	X			☐	☐	
13	0026_SW013_250828	2	28 Aug 2025		W	X			☐	☐	
14	0026_SW014_250828	2	28 Aug 2025		W	X			☐	☐	
15	0026_SW188_250828	4	28 Aug 2025		W	X			X	X	Extra sample for lab QC

Subcon / Forward Lab / Split WO: Eurofins
Lab / Analysis:
Relinquished Date:
WO:

Amin Jamsi 1:50PM 29/8 Rec: 29/8 1900

*EMAIL **REPORTS** TO: *(default to PM if blank)*	lewis.roso@ghd.com; jarrad mawbey@ghd.com; matthew.westl@ghd.com; helen.milne@ghd.com, esdat+ghd_au@esdatlabsync.net

*** STORAGE REQUIREMENTS**
Please check box.
Standard Storage time from receipt of samples:
Waters - 3 weeks
Soils - 2 months

- [X] Standard Storage
- [ ] Extended Storage

Specify Disposal Date:

Note: Extended storage incurs a fee and requires a signed agreement.

*** TURNAROUND**
Please check box.
(Not all tests can be expedited, contact Client Services for more information)

- [X] 5+ days (no surcharge)
- [ ] 3 day (+15%)
- [ ] 2 day (+30%)
- [ ] 1 day (+50%)

***ANALYSIS REQUIRED**
(NB. ALS Quote No. and/or Analysis Suite Codes must be listed to attract suite/quoted price)
Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).
Mark an X in the boxes below analysis to indicate the parameter listed above to be tested on that sample.

Country of Origin:
(if not Australia)

WO Sticker to go here.
(ALS use only)

Comments:

ALS Use Only Lab ID	Sample ID	Depth	Date/Time	No. Bottles	MATRIX: Soil/Solid(S) Water(W) Sediments (SD), Dust (D), Product (P), Biota (B), Biosolid (BS)	EP231X (PFAS - Full Suite (30 analytes))	HOLD	Forward to Eurofins	Lab QC (additional bottles req.) Dup	Lab QC MS	Additional Information (Comment on hazards - e.g., asbestos, known high contamination)
16	0026_SW008_250828	2	28 Aug 2025		W	X			☐	☐	
17	0026_SW049_250828	2	28 Aug 2025		W	X			☐	☐	
18	0026_SW185_250828	2	28 Aug 2025		W	X			☐	☐	
–	~~0026_SW065_250828~~	~~2~~	~~28 Aug 2025~~		~~W~~	~~X~~			☐	☐	
19	0026_SW004B_250829	2	29 Aug 2025		W	X			☐	☐	
									☐	☐	
20	0026_QC100_250828	2	28 Aug 2025	2	W	X			☐	☐	
21	0026_QC101_250828	2	28 Aug 2025	2	W	X			☐	☐	
–	0026_QC200_250828	2	28 Aug 2025	2	W	X		X	☐	☐	Please forward to Eurofins - PFAS Extended Suite - 30 PFAS
–	0026_QC201_250828	2	28 Aug 2025	2	W	X		X	☐	☐	Please forward to Eurofins - PFAS Extended Suite - 30 PFAS
22	0026_QC500_250829	2	29th	2	W	X			☐	☐	Trip Blank Water

Receipt Detail (Lab Use ONLY)	Chilling Method: Ice: Frozen / Melted; Ice Bricks: Frozen / Thawed; None	Sample Temp at Receipt: °C °C °C	Security Seal Intact (circle): Yes / No / NA(None)	Carrier Details: ☐ Courier/Post ☐ Client; Con Note #	Packaging: (Circle) Hard Esky / Foam Esky / Box/Bag/Other; Count # # #

Relinquished by: Lewis Roso	Signature: [signature]	Date/Time: 29/[illegible]/2025 1600	Received by: ALS Wollongong	Signature	Date/Time:
Relinquished by:	Signature:	Date/Time:	Received by: Wag	Signature [signature]	Date/Time: 29/8/25 1900

eurofins | Environment Testing

www.eurofins.com.au EnviroSales@eurofinsanz.com

Eurofins Environment Testing Australia Pty Ltd

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Melbourne	Geelong	Sydney	Canberra	Brisbane	Newcastle
6 Monterey Road	19/8 Lewalan Street	179 Magowar Road	Unit 1,2 Dacre Street	1/21 Smallwood Place	1/2 Frost Drive
Dandenong South	Grovedale	Girraween	Mitchell	Murarrie	Mayfield West
VIC 3175	VIC 3216	NSW 2145	ACT 2911	QLD 4172	NSW 2304
+61 3 8564 5000	+61 3 8564 5000	+61 2 9900 8400	+61 2 6113 8091	+61 7 3902 4600	+61 2 4968 8448
NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261
Site# 1254	Site# 25403	Site# 18217	Site# 25466	Site# 20794 & 2780	Site# 25079

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Site# 2370 & 2554

Eurofins Environment Testing NZ Ltd

NZBN: 9429046024954

Auckland	Auckland (Focus)	Christchurch	Tauranga
35 O'Rorke Road	Unit C1/4 Pacific Rise	43 Detroit Drive	1277 Cameron Road
Penrose	Mount Wellington	Rolleston	Gate Pa
Auckland 1061	Auckland 1061	Christchurch 7675	Tauranga 3112
+64 9 526 4551	+64 9 525 0568	+64 3 343 5201	+64 9 525 0568
IANZ# 1327	IANZ# 1308	IANZ# 1290	IANZ# 1402

Sample Receipt Advice

Company name: GHD Pty Ltd NSW
Contact name: Helen Milne
Project name: NSW_0026_PFASOMP_25/HMAS ALBATROSS OMP 2025
Project ID: Not provided
Turnaround time: 5 Day
Date/Time received Sep 2, 2025 1:10 PM
Eurofins reference 1263091

Sample Information

✓	A detailed list of analytes logged into our LIMS, is included in the attached summary table.
✓	Sample Temperature of chilled sample on the batch as recorded by Eurofins Sample Receipt : 1.2 degrees Celsius.
✓	All samples have been received as described on the above COC.
✓	COC has been completed correctly.
✓	Attempt to chill was evident.
✓	Appropriately preserved sample containers have been used.
✓	All samples were received in good condition.
✓	Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
✓	Appropriate sample containers have been used.
✓	Sample containers for volatile analysis received with zero headspace.
X	Split sample sent to requested external lab.
X	Some samples have been subcontracted.
N/A	Custody Seals intact (if used).

Notes

Contact

If you have any questions with respect to these samples, please contact your Analytical Services Manager:

Adam Bateup on phone : or by email: Adam.Bateup@eurofinsanz.com

Results will be delivered electronically via email to Helen Milne - helen.milne@ghd.com.au.

Note: A copy of these results will also be delivered to the general GHD Pty Ltd NSW email address.

eurofins

web: www.eurofins.com.au
email: EnviroSales@eurofinsanz.com

Eurofins Environment Testing Australia Pty Ltd
ABN: 50 005 085 521

Melbourne	Geelong	Sydney	Canberra	Brisbane	Newcastle
6 Monterey Road	19/8 Lewalan Street	179 Magowar Road	Unit 1,2 Dacre Street	1/21 Smallwood Place	1/2 Frost Drive
Dandenong South	Grovedale	Girraween	Mitchell	Murarrie	Mayfield West
VIC 3175	VIC 3216	NSW 2145	ACT 2911	QLD 4172	NSW 2304
+61 3 8564 5000	+61 3 8564 5000	+61 2 9900 8400	+61 2 6113 8091	+61 7 3902 4600	+61 2 4968 8448
NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261
Site# 1254	Site# 25403	Site# 18217	Site# 25466	Site# 20794 & 2780	Site# 25079

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Auckland	Auckland (Focus)	Christchurch	Tauranga
35 O'Rorke Road	Unit C1/4 Pacific Rise	43 Detroit Drive	1277 Cameron Road
Penrose	Mount Wellington	Rolleston	Gate Pa
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IANZ# 1327	IANZ# 1308	IANZ# 1290	IANZ# 1402

Company Name: GHD Pty Ltd NSW
Address: Level 15, 133 Castlereagh Street
Sydney
NSW 2000

Project Name: NSW_0026_PFASOMP_25/HMAS ALBATROSS OMP 2025

Order No.: 12626622
Report #: 1263091
Phone: 02 9239 7100
Fax: 02 9239 7199

Received: Sep 2, 2025 1:10 PM
Due: Sep 9, 2025
Priority: 5 Day
Contact Name: Helen Milne

Eurofins Analytical Services Manager : Adam Bateup

Sample Detail						Per- and Polyfluoroalkyl Substances (PFASs)
Sydney Laboratory - NATA # 1261 Site # 18217						X
External Laboratory						
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**	
1	0026-QC200_250828	Aug 28, 2025		Water	S25-Se0005906	X
2	0026-QC201_250828	Aug 28, 2025		Water	S25-Se0005907	X
Test Counts						2

GHD Pty Ltd NSW
Level 15, 133 Castlereagh Street
Sydney
NSW 2000

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
NATA is a signatory to the ILAC Mutual Recognition Arrangement for the mutual recognition of the equivalence of testing, medical testing, calibration, inspection, proficiency testing scheme providers and reference materials producers reports and certificates.

Attention: **Marcus Gaffney**

Report **1263091-W**
Project name NSW_0026_PFASOMP_25/HMAS ALBATROSS OMP 2025
Received Date Sep 02, 2025

Client Sample ID			**0026-QC200_250828**	**0026-QC201_250828**
Sample Matrix			**Water**	**Water**
Eurofins Sample No.			**S25-Se0005906**	**S25-Se0005907**
Date Sampled			**Aug 28, 2025**	**Aug 28, 2025**
Test/Reference	LOR	Unit		
Perfluoroalkyl carboxylic acids (PFCAs)				
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	0.13
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	0.06	0.24
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	0.25	1.9
Perfluoroheptanoic acid (PFHpA)[N11]	0.01	ug/L	[N09]0.04	[N09]0.30
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	[N09]0.06	[N09]0.40
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA)[N11]	0.01	ug/L	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA)[N11]	0.01	ug/L	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA)[N11]	0.01	ug/L	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA)[N15]	0.01	ug/L	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA)[N11]	0.01	ug/L	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	111	106
13C5-PFPeA (surr.)	1	%	127	138
13C5-PFHxA (surr.)	1	%	126	112
13C4-PFHpA (surr.)	1	%	113	99
13C8-PFOA (surr.)	1	%	128	131
13C5-PFNA (surr.)	1	%	113	103
13C6-PFDA (surr.)	1	%	104	98
13C2-PFUnDA (surr.)	1	%	98	96
13C2-PFDoDA (surr.)	1	%	86	96
13C2-PFTeDA (surr.)	1	%	76	86
Perfluoroalkyl sulfonamido substances				
Perfluorooctane sulfonamide (FOSA)[N11]	0.05	ug/L	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	107	127
D3-N-MeFOSA (surr.)	1	%	87	109
D5-N-EtFOSA (surr.)	1	%	98	110

Client Sample ID			0026-QC200_250828	0026-QC201_250828
Sample Matrix			Water	Water
Eurofins Sample No.			S25-Se0005906	S25-Se0005907
Date Sampled			Aug 28, 2025	Aug 28, 2025
Test/Reference	LOR	Unit		
Perfluoroalkyl sulfonamido substances				
D7-N-MeFOSE (surr.)	1	%	75	84
D9-N-EtFOSE (surr.)	1	%	84	86
D5-N-EtFOSAA (surr.)	1	%	97	96
D3-N-MeFOSAA (surr.)	1	%	91	98
Perfluoroalkyl sulfonic acids (PFSAs)				
Perfluorobutanesulfonic acid (PFBS)[N11]	0.01	ug/L	[N09]0.16	[N09]1.4
Perfluorononanesulfonic acid (PFNS)[N15]	0.01	ug/L	[N09]0.01	[N09]0.02
Perfluoropropanesulfonic acid (PFPrS)[N15]	0.01	ug/L	0.05	0.43
Perfluoropentanesulfonic acid (PFPeS)[N15]	0.01	ug/L	[N09]0.12	[N09]1.6
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.01	ug/L	[N09]0.97	[N09]10
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.01	ug/L	[N09]0.04	[N09]0.40
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	[N09]1.3	[N09]8.6
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	[N09]0.01	< 0.01
13C3-PFBS (surr.)	1	%	113	101
18O2-PFHxS (surr.)	1	%	125	91
13C8-PFOS (surr.)	1	%	107	88
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)[N11]	0.05	ug/L	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	148	126
13C2-6:2 FTSA (surr.)	1	%	109	108
13C2-8:2 FTSA (surr.)	1	%	99	100
13C2-10:2 FTSA (surr.)	1	%	94	92
PFASs Summations				
Sum (PFHxS + PFOS)*	0.01	ug/L	2.27	18.6
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	2.84	22.97
Sum of PFASs (n=30)*	0.1	ug/L	3.1	25

Sample History

Where samples are submitted/analysed over several days, the last date of extraction is reported.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs)	Sydney	Sep 04, 2025	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Sydney	Sep 04, 2025	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Sydney	Sep 04, 2025	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Sydney	Sep 04, 2025	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

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Eurofins Environment Testing Australia Pty Ltd
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6 Monterey Road	19/8 Lewalan Street	179 Magowar Road	Unit 1,2 Dacre Street	1/21 Smallwood Place	1/2 Frost Drive
Dandenong South	Grovedale	Girraween	Mitchell	Murarrie	Mayfield West
VIC 3175	VIC 3216	NSW 2145	ACT 2911	QLD 4172	NSW 2304
+61 3 8564 5000	+61 3 8564 5000	+61 2 9900 8400	+61 2 6113 8091	+61 7 3902 4600	+61 2 4968 8448
NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261
Site# 1254	Site# 25403	Site# 18217	Site# 25466	Site# 20794 & 2780	Site# 25079

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Eurofins Environment Testing NZ Ltd
NZBN: 9429046024954

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IANZ# 1327	IANZ# 1308	IANZ# 1290	IANZ# 1402

Company Name: GHD Pty Ltd NSW
Address: Level 15, 133 Castlereagh Street
Sydney
NSW 2000

Project Name: NSW_0026_PFASOMP_25/HMAS ALBATROSS OMP 2025

Order No.: 12626622
Report #: 1263091
Phone: 02 9239 7100
Fax: 02 9239 7199

Received: Sep 2, 2025 1:10 PM
Due: Sep 9, 2025
Priority: 5 Day
Contact Name: Helen Milne

Eurofins Analytical Services Manager : Adam Bateup

Sample Detail						Per- and Polyfluoroalkyl Substances (PFASs)
Sydney Laboratory - NATA # 1261 Site # 18217						X
External Laboratory						
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**	
1	0026-QC200_250828	Aug 28, 2025		Water	S25-Se0005906	X
2	0026-QC201_250828	Aug 28, 2025		Water	S25-Se0005907	X
Test Counts						2

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Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follow guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013. They are included in this QC report where applicable. Additional QC data may be available on request.
2. Unless otherwise stated, all soil/sediment/solid results are reported on a dry weight basis.
3. Unless otherwise stated, all biota/food results are reported on a wet weight basis on the edible portion.
4. For CEC results where the sample's origin is unknown or environmentally contaminated, the results should be used advisedly.
5. Actual LORs are matrix dependent. Quoted LORs may be raised where sample extracts are diluted due to interferences.
6. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds where annotated.
7. SVOC analysis on waters is performed on homogenised, unfiltered samples unless noted otherwise.
8. Samples were analysed on an 'as received' basis.
9. Information identified in this report with **blue** colour indicates data provided by customers that may have an impact on the results.
10. This report replaces any interim results previously issued.

Holding Times

Please refer to the '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 before sample receipt deadlines as stated on the SRA.

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

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

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether, the holding time is seven days; however, for all other VOCs, such as BTEX or C6-10 TRH, the holding time is 14 days.

Units

mg/kg: milligrams per kilogram	**mg/L:** milligrams per litre	**ppm:** parts per million
µg/L: micrograms per litre	**ppb:** parts per billion	**%:** Percentage
org/100 mL: Organisms per 100 millilitres	**NTU:** Nephelometric Turbidity Units	**MPN/100 mL:** Most Probable Number of organisms per 100 millilitres
CFU: Colony Forming Unit	**Colour:** Pt-Co Units (CU)	

Terms

APHA	American Public Health Association
CEC	Cation Exchange Capacity
COC	Chain of Custody
CP	Client Parent - QC was performed on samples pertaining to this report
CRM	Certified Reference Material (ISO17034) - reported as percent recovery.
Dry	Where moisture has been determined on a solid sample, the result is expressed on a dry weight basis.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
LOR	Limit of Reporting.
LCS	Laboratory Control Sample - reported as percent recovery.
Method Blank	In the case of solid samples, these are performed on laboratory-certified clean sands and in the case of water samples, these are performed on de-ionised water.
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC represents the sequence or batch that client samples were analysed within.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
SRA	Sample Receipt Advice
Surr - Surrogate	The addition of a similar compound to the analyte target is reported as percentage recovery. See below for acceptance criteria.
TBTO	Tributyltin oxide (*bis*-tributyltin oxide) - individual tributyltin compounds cannot be identified separately in the environment; however, free tributyltin was measured, and its values were converted stoichiometrically into tributyltin oxide for comparison with regulatory limits.
TCLP	Toxicity Characteristic Leaching Procedure
TEQ	Toxic Equivalency Quotient or Total Equivalence
QSM	US Department of Defense Quality Systems Manual Version 6.0
US EPA	United States Environmental Protection Agency
WA DWER	Sum of PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

The acceptance criteria should only be used as a guide and may be different when site-specific Sampling Analysis and Quality Plan (SAQP) have been implemented.

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%

NOTE: pH duplicates are reported as a range, not as RPD

Surrogate Recoveries: Recoveries must lie between 20-130% for Speciated Phenols & 50-150% for PFAS. SVOCs recoveries 20 – 150%, VOC recoveries 50 – 150%

PFAS field samples containing surrogate recoveries above the QC limit designated in QSM 6.0, where no positive PFAS results have been reported or reviewed, and no data was affected.

QC Data General Comments

1. Where a result is reported as 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 are not data from your samples.
3. 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.
4. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery, the term "INT" appears against that analyte.
5. For Matrix Spikes and LCS results, a dash "-" in the report means that the specific analyte was not added to the QC sample.
6. Duplicate RPDs are calculated from raw analytical data; thus, it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	ug/L	< 0.05			0.05	Pass	
Perfluoropentanoic acid (PFPeA)	ug/L	< 0.01			0.01	Pass	
Perfluorohexanoic acid (PFHxA)	ug/L	< 0.01			0.01	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/L	< 0.01			0.01	Pass	
Perfluorooctanoic acid (PFOA)	ug/L	< 0.01			0.01	Pass	
Perfluorononanoic acid (PFNA)	ug/L	< 0.01			0.01	Pass	
Perfluorodecanoic acid (PFDA)	ug/L	< 0.01			0.01	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/L	< 0.01			0.01	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/L	< 0.01			0.01	Pass	
Perfluorotridecanoic acid (PFTrDA)	ug/L	< 0.01			0.01	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/L	< 0.01			0.01	Pass	
Method Blank							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	ug/L	< 0.05			0.05	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/L	< 0.05			0.05	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/L	< 0.05			0.05	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	ug/L	< 0.05			0.05	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	ug/L	< 0.05			0.05	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/L	< 0.05			0.05	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/L	< 0.05			0.05	Pass	
Method Blank							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	ug/L	< 0.01			0.01	Pass	
Perfluorononanesulfonic acid (PFNS)	ug/L	< 0.01			0.01	Pass	
Perfluoropropanesulfonic acid (PFPrS)	ug/L	< 0.01			0.01	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/L	< 0.01			0.01	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/L	< 0.01			0.01	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/L	< 0.01			0.01	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/L	< 0.01			0.01	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/L	< 0.01			0.01	Pass	
Method Blank							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/L	< 0.01			0.01	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	ug/L	< 0.05			0.05	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/L	< 0.01			0.01	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/L	< 0.01			0.01	Pass	
LCS - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	%	83			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	86			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	79			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	69			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	96			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	91			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	100			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	118			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	94			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	104			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	94			50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	%	105			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	85			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	91			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	%	95			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	%	94			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	97			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	93			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	76			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	%	94			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	%	66			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	66			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	99			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	%	88			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	89			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	93			50-150	Pass	
LCS - % Recovery							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	103			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	%	97			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	94			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	90			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1					
Perfluorobutanoic acid (PFBA)	S25-Se0005906	CP	%	107			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	S25-Se0002872	NCP	%	69			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	S25-Se0002872	NCP	%	111			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	S25-Se0005906	CP	%	140			50-150	Pass	
Perfluorooctanoic acid (PFOA)	S25-Se0005906	CP	%	143			50-150	Pass	
Perfluorononanoic acid (PFNA)	S25-Se0005906	CP	%	120			50-150	Pass	
Perfluorodecanoic acid (PFDA)	S25-Se0005906	CP	%	120			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	S25-Se0005906	CP	%	119			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	S25-Se0005906	CP	%	115			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	S25-Se0005906	CP	%	124			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	S25-Se0005906	CP	%	121			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonamido substances				Result 1					
Perfluorooctane sulfonamide (FOSA)	S25-Se0005906	CP	%	115			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	S25-Se0005906	CP	%	107			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	S25-Se0005906	CP	%	126			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	S25-Se0005906	CP	%	121			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	S25-Se0005906	CP	%	126			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	S25-Se0005906	CP	%	120			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	S25-Se0002872	NCP	%	79			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1					
Perfluorobutanesulfonic acid (PFBS)	S25-Se0005906	CP	%	94			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	S25-Se0005906	CP	%	110			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	S25-Se0005906	CP	%	91			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	S25-Se0005906	CP	%	81			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	S25-Se0005906	CP	%	83			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	S25-Se0005906	CP	%	146			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	S25-Se0005906	CP	%	103			50-150	Pass	
Spike - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	S25-Se0005906	CP	%	115			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	S25-Se0005906	CP	%	139			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	S25-Se0005906	CP	%	111			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	S25-Se0005906	CP	%	139			50-150	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	S25-Se0014094	NCP	ug/L	< 2.5	< 2.5	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	S25-Se0014094	NCP	ug/L	0.52	0.54	4.0	30%	Pass	
Perfluorohexanoic acid (PFHxA)	S25-Se0014094	NCP	ug/L	0.97	1.1	16	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	S25-Se0014094	NCP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	S25-Se0014094	NCP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	S25-Se0014094	NCP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	S25-Se0014094	NCP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	S25-Se0014094	NCP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	S25-Se0014094	NCP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	S25-Se0014094	NCP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	S25-Se0014094	NCP	ug/L	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	S25-Se0014094	NCP	ug/L	< 2.5	< 2.5	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	S25-Se0014094	NCP	ug/L	< 2.5	< 2.5	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	S25-Se0014094	NCP	ug/L	< 2.5	< 2.5	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	S25-Se0014094	NCP	ug/L	< 2.5	< 2.5	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	S25-Se0014094	NCP	ug/L	< 2.5	< 2.5	<1	30%	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	S25-Se0014094	NCP	ug/L	< 2.5	< 2.5	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	S25-Se0014094	NCP	ug/L	< 2.5	< 2.5	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	S25-Se0014094	NCP	ug/L	0.58	0.68	16	30%	Pass	
Perfluorononanesulfonic acid (PFNS)	S25-Se0014094	NCP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)	S25-Se0014094	NCP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	S25-Se0014094	NCP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	S25-Se0014094	NCP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	S25-Se0014094	NCP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	S25-Se0014094	NCP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	S25-Se0014094	NCP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1	Result 2	RPD			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	S25-Se0014094	NCP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	S25-Se0014094	NCP	ug/L	< 10	< 10	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	S25-Se0014094	NCP	ug/L	< 0.5	< 0.5	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	S25-Se0014094	NCP	ug/L	< 0.5	< 0.5	<1	30%	Pass	

Comments

Sample Integrity

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

Qualifier Codes/Comments

Code	Description
N09	Quantification of linear and branched isomers has been conducted as a single total response using the relative response factor for the corresponding linear/branched standard.
N11	Isotope dilution is used for calibration of each native compound for which an exact labelled analogue is available (Isotope Dilution Quantitation). The isotopically labelled analogues allow identification and recovery correction of the concentration of the associated native PFAS compounds.
N15	Where the native PFAS compound does not have labelled analogue then the quantification is made using the Extracted Internal Standard Analyte with the closest retention time to the analyte and no recovery correction has been made (Internal Standard Quantitation).

Authorised by:

Nileshni Goundar	Analytical Services Manager
Roopesh Rangarajan	Senior Analyst-PFAS

Glenn Jackson
Managing Director

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

Measurement uncertainty of test data is available on request or please click here.

CHAIN OF CUSTODY

Mandatory Fields

Page 1 of 2

CoC #: *(if applicable)*

CLIENT CODE:	*PROJECT MANAGER: Helen Milne	SAMPLER: Lewis Roso	
*CLIENT: GHD Pty Ltd	*PM MOBILE: 0410 533 325	SAMPLER MOBILE: 439227076	
OFFICE: Sydney *(Invoiced Office)*	ALS QUOTE # GHD Rates 2025 *(Client PL if blank)*	PURCHASE ORDER NO.: 12626622	
PROJECT NO./PROJECT: NSW_0026_PFASOMP_25 / HMAS Albatross OMP 2025		SITE: 0026	

*INVOICE TO: *(client default if nil)*	accountspayableAU@ghd.com; adam.schipp@ghd.com
*EMAIL REPORTS TO: *(default to PM if blank)*	lewis.roso@ghd.com; jarrad.mawbey@ghd.com; matthew.westl@ghd.com; helen.milne@ghd.com; esdat+ghd_au@esdatlabsync.net

X CC Invoice to PM

BIOSECURITY

*** STORAGE REQUIREMENTS**
Please check box →
Standard Storage time from receipt of samples:
Waters - 3 weeks
Soils - 2 months

X Standard Storage
☐ Extended Storage
Specify Disposal Date:
Note: Extended storage incurs a fee and requires a signed agreement.

*** TURNAROUND**
Please check box →
(Not all tests can be expedited, contact Client Services for more information)

X 5+ days (no surcharge)
☐ 3 day (+15%)
☐ 2 day (+30%)
☐ 1 day (+50%)

***ANALYSIS REQUIRED**
(NB. ALS Quote No. and/or Analysis Suite Codes must be listed to attract suite/quoted price)
Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).
Mark an X in the boxes below analysis to indicate the parameter listed above to be tested on that sample.

Comments:

Environmental Division Sydney
Work Order Reference
ES2527020

Telephone : +61-2-8784 8555

ALS Use Only Lab ID	Sample ID	Depth	Date/Time	No. Bottles	MATRIX: Soil/Solid(S) Water(W) Sediments (SD), Dust (D), Product (P), Biota (B), Biosolid (BS)	EP231X (PFAS - Full Suite (30 analytes))	HOLD	Forward to Eurofins	Lab QC (additional bottles req.) Dup	Lab QC (additional bottles req.) MS	Additional Information (Comment on hazards - e.g., asbestos, known high contamination)
1	0026_SW007_250828	2	28 Aug 2025		W	X			☐	☐	
2	0026_SW018_250828	4	28 Aug 2025		W	X			X	X	Extra sample for lab QC
3	0026_SW009_250828	2	28 Aug 2025		W	X			☐	☐	
4	0026_SW012_250828	2	28 Aug 2025		W	X			☐	☐	
5	0026_SW106_250828	2	28 Aug 2025		W	X			☐	☐	
6	0026_SW123_250828	2	28 Aug 2025		W	X			☐	☐	
7	0026_SW005_250828	4	28 Aug 2025		W	X			X	X	Extra sample for lab QC
8	0026_SW006_250828	2	28 Aug 2025		W	X			☐	☐	
9	0026_SW020_250828	2	28 Aug 2025		W	X			☐	☐	
10	0026_SW124_250828	2	28 Aug 2025		W	X			☐	☐	
11	0026_SW187_250828	2	28 Aug 2025		W	X			☐	☐	
12	0026_SW002_250828	2	28 Aug 2025		W	X			☐	☐	
13	0026_SW013_250828	2	28 Aug 2025		W	X			☐	☐	
14	0026_SW014_250828	2	28 Aug 2025		W	X			☐	☐	
15	0026_SW188_250828	4	28 Aug 2025		W	X			X	X	Extra sample for lab QC

Subcon / Forward Lab / Split WO:
Eurofins
Lab / Analysis:
Relinquished Date:
WO:

Received 28/8/25 1900.

*EMAIL **REPORTS** TO: *(default to PM if blank)*	lewis.roso@ghd.com; jarrad.mawbey@ghd.com; matthew.westl@ghd.com; helen.milne@ghd.com; esdat+ghd_au@esdatlabsync.net

*** STORAGE REQUIREMENTS**
Please check box →
Standard Storage time from receipt of samples:
Waters - 3 weeks
Soils - 2 months

- [x] Standard Storage
- [ ] Extended Storage

Specify Disposal Date:

Note: Extended storage incurs a fee and requires a signed agreement.

*** TURNAROUND**
Please check box →
(Not all tests can be expedited, contact Client Services for more information)

- [x] 5+ days (no surcharge)
- [ ] 3 day (+15%)
- [ ] 2 day (+30%)
- [ ] 1 day (+50%)

***ANALYSIS REQUIRED**
(NB. ALS Quote No. and/or Analysis Suite Codes must be listed to attract suite/quoted price)
Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).
Mark an X in the boxes below analysis to indicate the parameter listed above to be tested on that sample.

Country of Origin: *(if not Australia)*

WO Sticker to go here.
(ALS use only)

Comments:

ALS Use Only / Lab ID	Sample ID	Depth	Date/Time	No. Bottles	MATRIX: Soil/Solid(S) Water(W), Sediments (SD), Dust (D), Product (P), Biota (B), Biosolid (BS)	EP231X (PFAS - Full Suite (30 analytes))										HOLD	Forward to Eurofins	Lab QC (additional bottles req.) Dup	Lab QC (additional bottles req.) MS	Additional Information (Comment on hazards - e.g., asbestos, known high contamination)
16	0026_SW008_250828	2	28 Aug 2025		W	X												☐	☐	
17	0026_SW049_250828	2	28 Aug 2025		W	X												☐	☐	
18	0026_SW185_250828	2	28 Aug 2025		W	X												☐	☐	
—	~~0026_SW065_250828~~	~~2~~	~~28 Aug 2025~~		~~W~~	~~X~~												☐	☐	
19	0026_SW004B_250829	2	29 Aug 2025		W	X												☐	☐	
																		☐	☐	
20	0026_QC100_250828	2	28 Aug 2025	2	W	X												☐	☐	
21	0026_QC101_250828	2	28 Aug 2025	2	W	X												☐	☐	
—	0026_QC200_250828	2	28 Aug 2025	2	W	X											X	☐	☐	Please forward to Eurofins - PFAS Extended Suite - 30 PFAS
=	0026_QC201_250828	2	28 Aug 2025	2	W	X											X	☐	☐	Please forward to Eurofins - PFAS Extended Suite - 30 PFAS
22	0026_QC500_250829	2	29/8	2	W	X												☐	☐	Trip Blank Water

Receipt Detail (Lab Use ONLY)	Chilling Method: Ice: Frozen / Melted; Ice Bricks: Frozen / Thawed; None	Sample Temp at Receipt	°C °C °C
Security Seal Intact *(circle)*	Yes / No / NA(None)	Carrier Details	☐ Courier/Post ☐ Client
Con Note #		Packaging: *(Circle)*	Hard Esky Foam Esky Box/Bag/Other
Count	# # #		

Relinquished by:	Lewis Roso	Signature:	Date/Time:	29/08/2025 1600	
Relinquished by:		Signature:	Date/Time:		
Received by:	ALS Wollongong	Signature	Date/Time:		
Received by:	Ways	Signature	Date/Time:	29/8/25 1900	

SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order	: **ES2527020**		
Client	: **GHD PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MS HELEN MILNE	Contact	: Samiksha Sathish
Address	: LEVEL 15, 133 CASTLEREAGH STREET SYDNEY NSW, AUSTRALIA 2000	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: helen.milne@ghd.com	E-mail	: samiksha.sathish@alsglobal.com
Telephone	: +61 02 9239 7100	Telephone	: +61-2-8784 8555
Facsimile	: +61 02 9239 7199	Facsimile	: +61-2-8784 8500
Project	: NSW_0026_PFASOMP_25 / HMAS Albatross QMP 2025	Page	: 1 of 4
Order number	: 12626622	Quote number	: EB2020GHDSER0038 (EN/000)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: 0026		
Sampler	: Lewis Roso		

Dates

Date Samples Received	: 29-Aug-2025 19:00	Issue Date	: 01-Sep-2025
Client Requested Due Date	: 08-Sep-2025	Scheduled Reporting Date	: **08-Sep-2025**

Delivery Details

Mode of Delivery	: Undefined	Security Seal	: Not Available
No. of coolers/boxes	: 1	Temperature	: 4.3'c, 3.6'c, 4.2'c - Ice present
Receipt Detail	: Large hard esky	No. of samples received / analysed	: 22 / 22

General Comments

- This report contains the following information:
  - Sample Container(s)/Preservation Non-Compliances
  - Summary of Sample(s) and Requested Analysis
  - Proactive Holding Time Report
  - Requested Deliverables
- QC200, QC201 has been sent to EUROFINS for PFAS analysis as per COC
- **Please refer to the Proactive Holding Time Report table below which summarises breaches of recommended holding times that have occurred prior to samples/instructions being received at the laboratory. The laboratory will process these samples unless instructions are received from you indicating you do not wish to proceed. The absence of this summary table indicates that all samples have been received within the recommended holding times for the analysis requested.**
- Please direct any queries you have regarding this work order to the above ALS laboratory contact.
- Unless otherwise stated, analytical work for this work order will be conducted at ALS Sydney, NATA accreditation no. 825, site no. 10911.
- Sample Disposal - Aqueous (3 weeks), Solid (2 months ± 1 week) from receipt of samples.
- Please be aware that APHA/NEPM recommends water and soil samples be chilled to less than or equal to 6°C for chemical analysis, and less than or equal to 10°C but unfrozen for Microbiological analysis. Where samples are received above this temperature, it should be taken into consideration when interpreting results. Refer to ALS EnviroMail 85 for ALS recommendations of the best practice for chilling samples after sampling and for maintaining a cool temperature during transit.

Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

- **No sample container / preservation non-compliance exists.**

Any sample identifications that cannot be displayed entirely in the analysis summary table will be listed below.

ES2527020-022 : [29-Aug-2025] : 0026_QC500_250828 - Trip Blank Water

Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package.
If no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component

Matrix: **WATER**

Laboratory sample ID	Sampling date / time	Sample ID	WATER - EP231X PFAS - Full Suite (31 analytes)
ES2527020-001	28-Aug-2025 00:00	0026_SW007_250828	✓
ES2527020-002	28-Aug-2025 00:00	0026_SW018_250828	✓
ES2527020-003	28-Aug-2025 00:00	0026_SW009_250828	✓
ES2527020-004	28-Aug-2025 00:00	0026_SW012_250828	✓
ES2527020-005	28-Aug-2025 00:00	0026_SW106_250828	✓
ES2527020-006	28-Aug-2025 00:00	0026_SW123_250828	✓
ES2527020-007	28-Aug-2025 00:00	0026_SW005_250828	✓
ES2527020-008	28-Aug-2025 00:00	0026_SW006_250828	✓
ES2527020-009	28-Aug-2025 00:00	0026_SW020_250828	✓
ES2527020-010	28-Aug-2025 00:00	0026_SW124_250828	✓
ES2527020-011	28-Aug-2025 00:00	0026_SW187_250828	✓
ES2527020-012	28-Aug-2025 00:00	0026_SW002_250828	✓
ES2527020-013	28-Aug-2025 00:00	0026_SW013_250828	✓
ES2527020-014	28-Aug-2025 00:00	0026_SW014_250828	✓
ES2527020-015	28-Aug-2025 00:00	0026_SW188_250828	✓
ES2527020-016	28-Aug-2025 00:00	0026_SW008_250828	✓
ES2527020-017	28-Aug-2025 00:00	0026_SW049_250828	✓
ES2527020-018	28-Aug-2025 00:00	0026_SW185_250828	✓
ES2527020-019	28-Aug-2025 00:00	0026_SW004B_250828	✓
ES2527020-020	28-Aug-2025 00:00	0026_QC100_250828	✓
ES2527020-021	28-Aug-2025 00:00	0026_QC101_250828	✓
ES2527020-022	29-Aug-2025 00:00	0026_QC500_250828 T...	✓

Proactive Holding Time Report

Sample(s) have been received within the recommended holding times for the requested analysis.

Requested Deliverables

ACCOUNTS PAYABLE

- A4 - AU Tax Invoice (INV)	Email	accountspayableAU@ghd.com

Accounts Payable Australia

- A4 - AU Tax Invoice (INV)	Email	accountspayableAU@ghd.com

Adam Schipp

- A4 - AU Tax Invoice (INV)	Email	adam.schipp@ghd.com

esdat

- *AU Certificate of Analysis - NATA (COA)	Email	esdat+ghd_au@esdatlabsync.net
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	esdat+ghd_au@esdatlabsync.net
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	esdat+ghd_au@esdatlabsync.net
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	esdat+ghd_au@esdatlabsync.net
- A4 - AU Tax Invoice (INV)	Email	esdat+ghd_au@esdatlabsync.net
- Chain of Custody (CoC) (COC)	Email	esdat+ghd_au@esdatlabsync.net
- EDI Format - ESDAT (ESDAT)	Email	esdat+ghd_au@esdatlabsync.net
- EDI Format - XTab (XTAB)	Email	esdat+ghd_au@esdatlabsync.net
- Electronic SRN for ESdat (ESRN_ESDAT)	Email	esdat+ghd_au@esdatlabsync.net

GHD LAB REPORTS

- *AU Certificate of Analysis - NATA (COA)	Email	ghdlabreports@ghd.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	ghdlabreports@ghd.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	ghdlabreports@ghd.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	ghdlabreports@ghd.com
- EDI Format - ESDAT (ESDAT)	Email	ghdlabreports@ghd.com
- Electronic SRN for ESdat (ESRN_ESDAT)	Email	ghdlabreports@ghd.com

HELEN MILNE

- *AU Certificate of Analysis - NATA (COA)	Email	helen.milne@ghd.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	helen.milne@ghd.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	helen.milne@ghd.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	helen.milne@ghd.com
- A4 - AU Tax Invoice (INV)	Email	helen.milne@ghd.com
- Chain of Custody (CoC) (COC)	Email	helen.milne@ghd.com
- EDI Format - ESDAT (ESDAT)	Email	helen.milne@ghd.com
- EDI Format - XTab (XTAB)	Email	helen.milne@ghd.com
- Electronic SRN for ESdat (ESRN_ESDAT)	Email	helen.milne@ghd.com

Jarrad Mawbey

- *AU Certificate of Analysis - NATA (COA)	Email	Jarrad.Mawbey@ghd.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	Jarrad.Mawbey@ghd.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	Jarrad.Mawbey@ghd.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	Jarrad.Mawbey@ghd.com
- Chain of Custody (CoC) (COC)	Email	Jarrad.Mawbey@ghd.com
- EDI Format - ESDAT (ESDAT)	Email	Jarrad.Mawbey@ghd.com
- EDI Format - XTab (XTAB)	Email	Jarrad.Mawbey@ghd.com
- Electronic SRN for ESdat (ESRN_ESDAT)	Email	Jarrad.Mawbey@ghd.com

Lewis Roso

- *AU Certificate of Analysis - NATA (COA)	Email	lewis.roso@ghd.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	lewis.roso@ghd.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	lewis.roso@ghd.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	lewis.roso@ghd.com
- Chain of Custody (CoC) (COC)	Email	lewis.roso@ghd.com
- EDI Format - ESDAT (ESDAT)	Email	lewis.roso@ghd.com
- EDI Format - XTab (XTAB)	Email	lewis.roso@ghd.com
- Electronic SRN for ESdat (ESRN_ESDAT)	Email	lewis.roso@ghd.com

MATTHEW WEST

- *AU Certificate of Analysis - NATA (COA)	Email	Matthew.West@ghd.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	Matthew.West@ghd.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	Matthew.West@ghd.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	Matthew.West@ghd.com
- Chain of Custody (CoC) (COC)	Email	Matthew.West@ghd.com
- EDI Format - ESDAT (ESDAT)	Email	Matthew.West@ghd.com
- EDI Format - XTab (XTAB)	Email	Matthew.West@ghd.com
- Electronic SRN for ESdat (ESRN_ESDAT)	Email	Matthew.West@ghd.com

CERTIFICATE OF ANALYSIS

Work Order	: **ES2527020**	Page	: 1 of 13
Client	: **GHD PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MS HELEN MILNE	Contact	: Samiksha Sathish
Address	: LEVEL 15, 133 CASTLEREAGH STREET SYDNEY NSW, AUSTRALIA 2000	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: +61 02 9239 7100	Telephone	: +61-2-8784 8555
Project	: NSW_0026_PFASOMP_25 / HMAS Albatross QMP 2025	Date Samples Received	: 29-Aug-2025 19:00
Order number	: 12626622	Date Analysis Commenced	: 02-Sep-2025
C-O-C number	: ----	Issue Date	: 04-Sep-2025 10:50
Sampler	: Lewis Roso		
Site	: 0026		
Quote number	: EN/000		
No. of samples received	: 22		
No. of samples analysed	: 22		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alex Rossi	Organic Chemist	Sydney Organics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contract for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- EP231X - Per- and Polyfluoroalkyl Substances (PFAS): Samples received in 20mL or 125mL bottles have been tested in accordance with the QSM5.4 compliant, NATA accredited method. 60mL or 250mL bottles have been tested to the legacy QSM 5.1 aligned, NATA accredited method.

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0026_SW007_250828	0026_SW018_250828	0026_SW009_250828	0026_SW012_250828	0026_SW106_250828
				Sampling date / time	28-Aug-2025 00:00	28-Aug-2025 00:00	28-Aug-2025 00:00	28-Aug-2025 00:00	28-Aug-2025 00:00
Compound	CAS Number	LOR	Unit		ES2527020-001	ES2527020-002	ES2527020-003	ES2527020-004	ES2527020-005
					Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		**0.14**	**0.15**	**0.19**	**0.06**	**0.34**
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		**0.13**	**0.16**	**0.25**	**0.07**	**0.41**
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		**0.77**	**1.58**	**3.34**	**0.71**	**3.89**
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		**0.04**	**0.07**	**0.20**	**0.03**	**0.24**
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		**0.74**	**1.82**	**7.45**	**0.85**	**11.4**
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L		<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		**0.06**	**0.08**	**0.11**	**0.02**	**0.15**
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		**0.26**	**0.32**	**0.59**	**0.10**	**0.70**
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		**0.04**	**0.05**	**0.07**	<0.02	**0.10**
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		**0.06**	**0.11**	**0.19**	**0.03**	**0.24**
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0026_SW007_250828	0026_SW018_250828	0026_SW009_250828	0026_SW012_250828	0026_SW106_250828
				Sampling date / time	28-Aug-2025 00:00	28-Aug-2025 00:00	28-Aug-2025 00:00	28-Aug-2025 00:00	28-Aug-2025 00:00
Compound	CAS Number	LOR	Unit		ES2527020-001	ES2527020-002	ES2527020-003	ES2527020-004	ES2527020-005
					Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
EP231P: PFAS Sums									
Sum of PFAS	----	0.01	µg/L		**2.28**	**4.41**	**12.5**	**1.90**	**17.7**
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		**1.51**	**3.40**	**10.8**	**1.56**	**15.3**
Sum of PFAS (WA DER List)	----	0.01	µg/L		**2.07**	**4.11**	**11.9**	**1.77**	**16.8**
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**88.9**	**86.4**	**91.5**	**92.2**	**92.4**
13C8-PFOA	----	0.02	%		**95.6**	**93.0**	**94.9**	**91.0**	**94.4**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0026_SW123_250828	0026_SW005_250828	0026_SW006_250828	0026_SW020_250828	0026_SW124_250828
				Sampling date / time	28-Aug-2025 00:00	28-Aug-2025 00:00	28-Aug-2025 00:00	28-Aug-2025 00:00	28-Aug-2025 00:00
Compound	CAS Number	LOR	Unit		ES2527020-006	ES2527020-007	ES2527020-008	ES2527020-009	ES2527020-010
					Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		<0.02	**0.15**	**0.33**	**0.06**	**1.16**
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		<0.02	**0.17**	**0.35**	**0.08**	**1.54**
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		**0.03**	**1.46**	**3.19**	**0.76**	**9.01**
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		<0.02	**0.07**	**0.17**	**0.02**	**0.26**
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		**0.01**	**1.77**	**3.84**	**0.66**	**4.68**
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L		<0.1	<0.1	<0.1	<0.1	**0.1**
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		<0.02	**0.07**	**0.14**	**0.02**	**0.28**
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		<0.02	**0.33**	**0.78**	**0.10**	**2.23**
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		<0.02	**0.05**	**0.12**	<0.02	**0.22**
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		<0.01	**0.11**	**0.24**	**0.02**	**0.42**
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0026_SW123_250828	0026_SW005_250828	0026_SW006_250828	0026_SW020_250828	0026_SW124_250828
				Sampling date / time	28-Aug-2025 00:00	28-Aug-2025 00:00	28-Aug-2025 00:00	28-Aug-2025 00:00	28-Aug-2025 00:00
Compound	CAS Number	LOR	Unit		ES2527020-006	ES2527020-007	ES2527020-008	ES2527020-009	ES2527020-010
					Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
EP231P: PFAS Sums									
Sum of PFAS	----	0.01	µg/L		**0.04**	**4.25**	**9.30**	**1.74**	**20.4**
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		**0.04**	**3.23**	**7.03**	**1.42**	**13.7**
Sum of PFAS (WA DER List)	----	0.01	µg/L		**0.04**	**3.94**	**8.64**	**1.62**	**18.1**
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**93.7**	**95.8**	**92.8**	**97.2**	**91.6**
13C8-PFOA	----	0.02	%		**94.8**	**91.8**	**94.3**	**91.3**	**96.0**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0026_SW187_250828	0026_SW002_250828	0026_SW013_250828	0026_SW014_250828	0026_SW188_250828
				Sampling date / time	28-Aug-2025 00:00	28-Aug-2025 00:00	28-Aug-2025 00:00	28-Aug-2025 00:00	28-Aug-2025 00:00
Compound	CAS Number	LOR	Unit		ES2527020-011	ES2527020-012	ES2527020-013	ES2527020-014	ES2527020-015
					Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		<0.02	<0.02	**0.06**	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		<0.02	<0.02	**0.08**	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		**0.09**	**0.02**	**0.80**	<0.01	**0.06**
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		<0.02	<0.02	**0.03**	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		**0.16**	**0.01**	**1.48**	<0.01	**0.10**
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L		<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		<0.02	<0.02	**0.02**	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		<0.02	<0.02	**0.13**	<0.02	<0.02
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		<0.01	<0.01	**0.04**	<0.01	<0.01
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0026_SW187_250828	0026_SW002_250828	0026_SW013_250828	0026_SW014_250828	0026_SW188_250828
				Sampling date / time	28-Aug-2025 00:00	28-Aug-2025 00:00	28-Aug-2025 00:00	28-Aug-2025 00:00	28-Aug-2025 00:00
Compound	CAS Number	LOR	Unit		ES2527020-011	ES2527020-012	ES2527020-013	ES2527020-014	ES2527020-015
					Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
EP231P: PFAS Sums									
Sum of PFAS	----	0.01	µg/L		**0.25**	**0.03**	**2.66**	<0.01	**0.16**
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		**0.25**	**0.03**	**2.28**	<0.01	**0.16**
Sum of PFAS (WA DER List)	----	0.01	µg/L		**0.25**	**0.03**	**2.53**	<0.01	**0.16**
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**96.6**	**92.6**	**97.9**	**91.6**	**95.2**
13C8-PFOA	----	0.02	%		**92.6**	**89.8**	**90.8**	**87.2**	**91.5**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0026_SW008_250828	0026_SW049_250828	0026_SW185_250828	0026_SW004B_250828	0026_QC100_250828
				Sampling date / time	28-Aug-2025 00:00	28-Aug-2025 00:00	28-Aug-2025 00:00	28-Aug-2025 00:00	28-Aug-2025 00:00
Compound	CAS Number	LOR	Unit		ES2527020-016	ES2527020-017	ES2527020-018	ES2527020-019	ES2527020-020
					Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		**0.05**	**0.14**	**0.16**	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		**0.06**	**0.22**	**0.21**	<0.02	**0.13**
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		**0.52**	**1.50**	**1.50**	**0.09**	**0.82**
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		**0.02**	**0.06**	**0.05**	<0.02	**0.03**
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		**0.71**	**1.45**	**1.16**	**0.13**	**0.71**
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L		<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		<0.02	**0.04**	**0.04**	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		**0.11**	**0.30**	**0.32**	**0.02**	**0.26**
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		<0.02	**0.04**	**0.04**	<0.02	**0.03**
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		**0.03**	**0.08**	**0.08**	<0.01	**0.05**
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0026_SW008_250828	0026_SW049_250828	0026_SW185_250828	0026_SW004B_250828	0026_QC100_250828
				Sampling date / time	28-Aug-2025 00:00	28-Aug-2025 00:00	28-Aug-2025 00:00	28-Aug-2025 00:00	28-Aug-2025 00:00
Compound	CAS Number	LOR	Unit		ES2527020-016	ES2527020-017	ES2527020-018	ES2527020-019	ES2527020-020
					Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
EP231P: PFAS Sums									
Sum of PFAS	----	0.01	µg/L		**1.50**	**3.89**	**3.62**	**0.24**	**2.06**
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		**1.23**	**2.95**	**2.66**	**0.22**	**1.53**
Sum of PFAS (WA DER List)	----	0.01	µg/L		**1.42**	**3.55**	**3.30**	**0.24**	**1.87**
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**92.6**	**94.2**	**84.4**	**104**	**93.7**
13C8-PFOA	----	0.02	%		**89.5**	**92.2**	**89.3**	**87.8**	**94.2**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0026_QC101_250828	0026_QC500_250828 Trip Blank Water	----	----	----
				Sampling date / time	28-Aug-2025 00:00	29-Aug-2025 00:00	----	----	----
Compound	CAS Number	LOR	Unit		ES2527020-021	ES2527020-022	--------	--------	--------
					Result	Result	----	----	----
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		**1.20**	<0.02	----	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		**1.77**	<0.02	----	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		**9.20**	<0.01	----	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		**0.30**	<0.02	----	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		**6.04**	<0.01	----	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L		<0.02	<0.02	----	----	----
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L		**0.1**	<0.1	----	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		**0.32**	<0.02	----	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		**2.25**	<0.02	----	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		**0.25**	<0.02	----	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		**0.43**	<0.01	----	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L		<0.02	<0.02	----	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L		<0.02	<0.02	----	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L		<0.02	<0.02	----	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L		<0.02	<0.02	----	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L		<0.02	<0.02	----	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L		<0.05	<0.05	----	----	----
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L		<0.02	<0.02	----	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L		<0.05	<0.05	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0026_QC101_250828	0026_QC500_250828 Trip Blank Water	----	----	----
				Sampling date / time	28-Aug-2025 00:00	29-Aug-2025 00:00	----	----	----
Compound	CAS Number	LOR	Unit		ES2527020-021	ES2527020-022	--------	--------	--------
					Result	Result	----	----	----
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L		<0.05	<0.05	----	----	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L		<0.05	<0.05	----	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L		<0.05	<0.05	----	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L		<0.02	<0.02	----	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L		<0.02	<0.02	----	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L		<0.05	<0.05	----	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L		<0.05	<0.05	----	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L		<0.05	<0.05	----	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L		<0.05	<0.05	----	----	----
EP231P: PFAS Sums									
Sum of PFAS	----	0.01	µg/L		**22.3**	<0.01	----	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		**15.2**	<0.01	----	----	----
Sum of PFAS (WA DER List)	----	0.01	µg/L		**19.8**	<0.01	----	----	----
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**92.7**	**95.5**	----	----	----
13C8-PFOA	----	0.02	%		**91.6**	**93.8**	----	----	----

Surrogate Control Limits

Sub-Matrix: **WATER**		Recovery Limits (%)	
Compound	*CAS Number*	***Low***	***High***
EP231S: PFAS Surrogate			
13C4-PFOS	----	60	120
13C8-PFOA	----	60	120

QUALITY CONTROL REPORT

Work Order	: **ES2527020**	Page	: 1 of 11
Client	: **GHD PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MS HELEN MILNE	Contact	: Samiksha Sathish
Address	: LEVEL 15, 133 CASTLEREAGH STREET SYDNEY NSW, AUSTRALIA 2000	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: +61 02 9239 7100	Telephone	: +61-2-8784 8555
Project	: NSW_0026_PFASOMP_25 / HMAS Albatross QMP 2025	Date Samples Received	: 29-Aug-2025
Order number	: 12626622	Date Analysis Commenced	: 02-Sep-2025
C-O-C number	: ----	Issue Date	: 04-Sep-2025
Sampler	: Lewis Roso		
Site	: 0026		
Quote number	: EN/000		
No. of samples received	: 22		
No. of samples analysed	: 22		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Alex Rossi	Organic Chemist	Sydney Organics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 6828176)									
ES2526947-001	Anonymous	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	0.14	0.16	8.8	0% - 50%
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	0.97	0.96	0.0	0% - 20%
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
ES2526948-001	Anonymous	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	0.06	0.05	0.0	No Limit
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 6828177)									
ES2527020-002	0026_SW018_250828	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	1.58	1.47	7.4	0% - 20%
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	1.82	1.68	8.2	0% - 20%
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	0.15	0.16	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	0.16	0.16	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	0.07	0.07	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
ES2527020-019	0026_SW004B_250828	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	0.09	0.09	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	0.13	0.11	14.3	0% - 50%
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 6828177) - continued									
ES2527020-019	0026_SW004B_250828	EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 6828176)									
ES2526947-001	Anonymous	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	0.04	0.04	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	0.03	0.04	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	0.03	0.03	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	0.03	0.03	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
ES2526948-001	Anonymous	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 6828177)									
ES2527020-002	0026_SW018_250828	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	0.11	0.11	0.0	0% - 50%
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	0.08	0.08	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	0.32	0.34	6.0	0% - 50%
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	0.05	0.05	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 6828177) - continued									
ES2527020-002	0026_SW018_250828	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
ES2527020-019	0026_SW004B_250828	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	0.02	0.03	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 6828176)									
ES2526947-001	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
ES2526948-001	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 6828177)									

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 6828177) - continued									
ES2527020-002	0026_SW018_250828	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
ES2527020-019	0026_SW004B_250828	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 6828176)									
ES2526947-001	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	0.22	0.21	5.9	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
ES2526948-001	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 6828176) - continued									
ES2526948-001	Anonymous	EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 6828177)									
ES2527020-002	0026_SW018_250828	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
ES2527020-019	0026_SW004B_250828	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 6828176)									
ES2526947-001	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	1.46	1.47	0.7	0% - 20%
ES2526948-001	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	0.06	0.05	18.2	No Limit
EP231P: PFAS Sums (QC Lot: 6828177)									
ES2527020-002	0026_SW018_250828	EP231X: Sum of PFAS	----	0.01	µg/L	4.41	4.18	5.4	0% - 20%
ES2527020-019	0026_SW004B_250828	EP231X: Sum of PFAS	----	0.01	µg/L	0.24	0.23	4.3	0% - 20%

Method Blank (MB) and Laboratory Control Sample (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Sample (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **WATER**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6828176)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.25 µg/L	95.6	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.25 µg/L	110	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.25 µg/L	96.6	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	111	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.25 µg/L	102	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.25 µg/L	95.1	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6828177)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.25 µg/L	85.3	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.25 µg/L	114	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.25 µg/L	90.8	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	101	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.25 µg/L	89.4	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.25 µg/L	85.3	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6828176)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	105	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	110	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	109	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	110	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	109	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	106	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	105	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	109	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	103	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	77.2	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	96.5	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6828177)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	101	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	95.9	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	90.8	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	100	72.0	130

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6828177) - continued								
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	97.2	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	96.7	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	92.4	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	101	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	99.5	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	119	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	102	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6828176)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	110	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	102	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	93.0	62.6	147
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	114	66.0	145
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	117	57.6	145
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	108	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	109	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6828177)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	79.2	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	113	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	108	62.6	147
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	107	66.0	145
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	97.2	57.6	145
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	90.6	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	98.7	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6828176)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.25 µg/L	114	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.25 µg/L	96.3	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.25 µg/L	100	67.0	138
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	0.25 µg/L	111	71.4	144

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6828177)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.25 µg/L	93.0	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.25 µg/L	102	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.25 µg/L	85.1	67.0	138
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	0.25 µg/L	72.2	71.4	144

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6828176)							
ES2526948-001	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.25 µg/L	103	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.25 µg/L	109	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.25 µg/L	97.9	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.25 µg/L	110	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.25 µg/L	96.6	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.25 µg/L	94.6	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6828177)							
ES2527020-007	0026_SW005_250828	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.25 µg/L	98.7	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.25 µg/L	102	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.25 µg/L	# Not Determined	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.25 µg/L	108	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.25 µg/L	# Not Determined	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.25 µg/L	99.7	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6828176)							
ES2526948-001	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	112	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	109	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	106	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	109	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	108	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	113	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	109	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	112	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	107	72.0	134

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*Concentration*	*MS*	*Low*	*High*
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6828176) - continued							
ES2526948-001	Anonymous	EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	76.2	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	121	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6828177)							
ES2527020-007	0026_SW005_250828	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	103	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	91.2	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	94.2	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	96.0	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	92.8	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	102	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	109	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	99.1	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	110	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	115	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	108	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6828176)							
ES2526948-001	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	94.3	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	80.1	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	72.9	62.6	147
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	116	66.0	145
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	114	57.6	145
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	112	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	105	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6828177)							
ES2527020-007	0026_SW005_250828	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	96.0	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	119	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	109	62.6	147
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	126	66.0	145
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	125	57.6	145
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	109	65.0	136

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*Concentration*	*MS*	*Low*	*High*
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6828177) - continued							
ES2527020-007	0026_SW005_250828	EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	94.8	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6828176)							
ES2526948-001	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.25 µg/L	111	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.25 µg/L	94.3	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.25 µg/L	92.4	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.25 µg/L	94.9	71.4	144
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6828177)							
ES2527020-007	0026_SW005_250828	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.25 µg/L	116	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.25 µg/L	108	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.25 µg/L	113	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.25 µg/L	78.7	71.4	144

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2527020**	Page	: 1 of 6
Client	: **GHD PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MS HELEN MILNE	Telephone	: +61-2-8784 8555
Project	: NSW_0026_PFASOMP_25 / HMAS Albatross QMP 2025	Date Samples Received	: 29-Aug-2025
Site	: 0026	Issue Date	: 04-Sep-2025
Sampler	: Lewis Roso	No. of samples received	: 22
Order number	: 12626622	No. of samples analysed	: 22

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Duplicate outliers occur.**
- **NO Laboratory Control outliers occur.**
- **Matrix Spike outliers exist - please see following pages for full details.**
- **For all regular sample matrices, where applicable to the methodology, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **NO Quality Control Sample Frequency Outliers exist.**

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **WATER**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Matrix Spike (MS) Recoveries							
EP231A: Perfluoroalkyl Sulfonic Acids	ES2527020--007	0026_SW005_250828	**Perfluorohexane sulfonic acid (PFHxS)**	355-46-4	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**
EP231A: Perfluoroalkyl Sulfonic Acids	ES2527020--007	0026_SW005_250828	**Perfluorooctane sulfonic acid (PFOS)**	1763-23-1	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231A: Perfluoroalkyl Sulfonic Acids							
HDPE (no PTFE) (EP231X) 0026_SW007_250828, 0026_SW018_250828, 0026_SW009_250828, 0026_SW012_250828, 0026_SW106_250828, 0026_SW123_250828, 0026_SW005_250828, 0026_SW006_250828, 0026_SW020_250828, 0026_SW124_250828, 0026_SW187_250828, 0026_SW002_250828, 0026_SW013_250828, 0026_SW014_250828, 0026_SW188_250828, 0026_SW008_250828, 0026_SW049_250828, 0026_SW185_250828, 0026_SW004B_250828, 0026_QC100_250828, 0026_QC101_250828	**28-Aug-2025**	**02-Sep-2025**	24-Feb-2026	✓	**03-Sep-2025**	24-Feb-2026	✓
HDPE (no PTFE) (EP231X) 0026_QC500_250828 - Trip Blank Water	**29-Aug-2025**	**02-Sep-2025**	25-Feb-2026	✓	**03-Sep-2025**	25-Feb-2026	✓

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE (no PTFE) (EP231X)							
0026_SW007_250828, 0026_SW018_250828, 0026_SW009_250828, 0026_SW012_250828, 0026_SW106_250828, 0026_SW123_250828, 0026_SW005_250828, 0026_SW006_250828, 0026_SW020_250828, 0026_SW124_250828, 0026_SW187_250828, 0026_SW002_250828, 0026_SW013_250828, 0026_SW014_250828, 0026_SW188_250828, 0026_SW008_250828, 0026_SW049_250828, 0026_SW185_250828, 0026_SW004B_250828, 0026_QC100_250828, 0026_QC101_250828	**28-Aug-2025**	**02-Sep-2025**	24-Feb-2026	✓	**03-Sep-2025**	24-Feb-2026	✓
HDPE (no PTFE) (EP231X)							
0026_QC500_250828 - Trip Blank Water	**29-Aug-2025**	**02-Sep-2025**	25-Feb-2026	✓	**03-Sep-2025**	25-Feb-2026	✓
EP231C: Perfluoroalkyl Sulfonamides							
HDPE (no PTFE) (EP231X)							
0026_SW007_250828, 0026_SW018_250828, 0026_SW009_250828, 0026_SW012_250828, 0026_SW106_250828, 0026_SW123_250828, 0026_SW005_250828, 0026_SW006_250828, 0026_SW020_250828, 0026_SW124_250828, 0026_SW187_250828, 0026_SW002_250828, 0026_SW013_250828, 0026_SW014_250828, 0026_SW188_250828, 0026_SW008_250828, 0026_SW049_250828, 0026_SW185_250828, 0026_SW004B_250828, 0026_QC100_250828, 0026_QC101_250828	**28-Aug-2025**	**02-Sep-2025**	24-Feb-2026	✓	**03-Sep-2025**	24-Feb-2026	✓
HDPE (no PTFE) (EP231X)							
0026_QC500_250828 - Trip Blank Water	**29-Aug-2025**	**02-Sep-2025**	25-Feb-2026	✓	**03-Sep-2025**	25-Feb-2026	✓

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE (no PTFE) (EP231X)							
0026_SW007_250828, 0026_SW018_250828, 0026_SW009_250828, 0026_SW012_250828, 0026_SW106_250828, 0026_SW123_250828, 0026_SW005_250828, 0026_SW006_250828, 0026_SW020_250828, 0026_SW124_250828, 0026_SW187_250828, 0026_SW002_250828, 0026_SW013_250828, 0026_SW014_250828, 0026_SW188_250828, 0026_SW008_250828, 0026_SW049_250828, 0026_SW185_250828, 0026_SW004B_250828, 0026_QC100_250828, 0026_QC101_250828	**28-Aug-2025**	**02-Sep-2025**	24-Feb-2026	✓	**03-Sep-2025**	24-Feb-2026	✓
HDPE (no PTFE) (EP231X)							
0026_QC500_250828 - Trip Blank Water	**29-Aug-2025**	**02-Sep-2025**	25-Feb-2026	✓	**03-Sep-2025**	25-Feb-2026	✓
EP231P: PFAS Sums							
HDPE (no PTFE) (EP231X)							
0026_SW007_250828, 0026_SW018_250828, 0026_SW009_250828, 0026_SW012_250828, 0026_SW106_250828, 0026_SW123_250828, 0026_SW005_250828, 0026_SW006_250828, 0026_SW020_250828, 0026_SW124_250828, 0026_SW187_250828, 0026_SW002_250828, 0026_SW013_250828, 0026_SW014_250828, 0026_SW188_250828, 0026_SW008_250828, 0026_SW049_250828, 0026_SW185_250828, 0026_SW004B_250828, 0026_QC100_250828, 0026_QC101_250828	**28-Aug-2025**	**02-Sep-2025**	24-Feb-2026	✓	**03-Sep-2025**	24-Feb-2026	✓
HDPE (no PTFE) (EP231X)							
0026_QC500_250828 - Trip Blank Water	**29-Aug-2025**	**02-Sep-2025**	25-Feb-2026	✓	**03-Sep-2025**	25-Feb-2026	✓

Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	4	33	**12.12**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	33	**6.06**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	33	**6.06**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	33	**6.06**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	WATER	In-house: Analysis of fresh and saline waters by solid phase extraction (SPE) followed by negative mode LC-ESI-MS/MS using MRM and isotope dilution or internal standard quantitation. Isotope dilution standards (where commercially available) and surrogates are added to the sample container. The entire contents are transferred to a weak anion exchange (WAX) solid phase extraction (SPE) cartridge. The sample container is successively rinsed with aliquots of the elution solvent. The eluted extract is combined with an equal volume of reagent water and a portion is filtered for analysis. Data quality objectives for internal standard recoveries are based on US EPA method 1633.

Preparation Methods	Method	Matrix	Method Descriptions
Solid Phase Extraction (SPE) for PFAS in water	ORG72	WATER	In-house: Isotopically labelled analogues of target analytes used as internal standards and surrogates are added to the sample container. The entire contents are transferred to a solid phase extraction (SPE) cartridge. The sample container is successively rinsed with aliquots of the elution solvent. The eluted extract is combined with an equal volume of reagent water and a portion is filtered for analysis. Method procedures conform to US DoD QSM 5.3, table B-15 requirements.

Appendix F

Field notes

SURFACE WATER AND SEDIMENT SAMPLING RECORD

PROJECT NO.:	12626622	**SURFACE WATER ID:**	0026_SW002
PROJECT NAME:	HMAS Albatross OMP	**SEDIMENT ID:**	
CLIENT:	Defence	**DATE:**	28/08/2025 **TIME:** 4:30pm
SITE:	26	**LOGGED BY:**	LR AN

COORDINATES/GPS *(if applicable)*

SAMPLING METHOD *(ie grab, bucket)* **SURFACE WATER:** Grab **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION Culvert under road

ENVIRONMENTAL OBSERVATIONS

WEATHER	sunny, windy
VEGETATION	Grass and lantana
SLOPE	low-moderate
EROSION	Moderate

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Pale brown, low to moderate turbidity, brittle sheen, no odour
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	12.2
DO (mg/L)	8.64
DO (%S)	77.00
CONDUCTIVITY (µS/cm)	422.2
pH (pH units)	6.56
REDOX (mV)	110.1
TURBIDITY (NTU)	363.35 ***Please note that this reading represents TDS (mg/L) and not Turbidity (NTU).**

HYDROLOGICAL DATA

FLOW MEASUREMENT	low
CROSS SECTION WIDTH (m)	3
DEPTH (m)	0.2
OTHER	

SAMPLE INFORMATION

SAMPLE ID (*one primary sample per row*)	NO. CONTAINERS	DUPLICATE ID (*if applicable*)	DUPLICATE ANALYSIS (*if applicable*)	COMMENT
0026_SW187_250828	2			

OTHER COMMENTS FOR CONSIDERATION
(e.g. health and safety, access issues, change in location, general observation, notes for future):

Crossing above culvert appears to be private property.

Pull up at gate approx 50 m from crossing and walk dowm easement

SURFACE WATER AND SEDIMENT SAMPLING RECORD

PROJECT NO.:	12626622	**SURFACE WATER ID:**	0026_SW004B
PROJECT NAME:	HMAS Albatross OMP	**SEDIMENT ID:**	
CLIENT:	Defence	**DATE:**	29/08/2025 **TIME:** 6:15:00 AM
SITE:	26	**LOGGED BY:**	LR JM

COORDINATES/GPS *(if applicable)*

SAMPLING METHOD *(ie grab, bucket)* **SURFACE WATER:** Grab **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION Outside bend of creek, sandy banks.

ENVIRONMENTAL OBSERVATIONS

WEATHER	Clear, Sunny
VEGETATION	None at sample location
SLOPE	low
EROSION	Clear, brown tinge, no odour or sheen, non-turbid.

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Pale brown, moderate turbidity, no odour or sheen
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	11.8
DO (mg/L)	10.14
DO (%S)	109.38
CONDUCTIVITY (µS/cm)	61.3
pH (pH units)	6.59
REDOX (mV)	119.9
TURBIDITY (NTU)	53.30 ***Please note that this reading represents TDS (mg/L) and not Turbidity (NTU).**

HYDROLOGICAL DATA

FLOW MEASUREMENT	Steady trickle
CROSS SECTION WIDTH (m)	3
DEPTH (m)	0.5
OTHER	

SAMPLE INFORMATION

SAMPLE ID (*one primary sample per row*)	NO. CONTAINERS	DUPLICATE ID (*if applicable*)	DUPLICATE ANALYSIS (*if applicable*)	COMMENT
0026_SW004B_250829	2			

OTHER COMMENTS FOR CONSIDERATION
(e.g. health and safety, access issues, change in location, general observation, notes for future):

SURFACE WATER AND SEDIMENT SAMPLING RECORD

PROJECT NO.:	12626622	**SURFACE WATER ID:**	SW005
PROJECT NAME:	HMAS Albatross OMP	**SEDIMENT ID:**	
CLIENT:	Defence	**DATE:**	28/08/2025 **TIME:** 1:22:00 PM
SITE:	26	**LOGGED BY:**	LR AN

COORDINATES/GPS *(if applicable)*

SAMPLING METHOD *(ie grab, bucket)* **SURFACE WATER:** Grab **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION Large pool below small fall (1-2 m)

ENVIRONMENTAL OBSERVATIONS

WEATHER	Windy, Sunny
VEGETATION	None
SLOPE	Flat, Steep approaching pool
EROSION	none

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Pale brown, ,ow turbidity, no odour or sheen, some foam formation evident
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	13.9
DO (mg/L)	9.58
DO (%S)	92.20
CONDUCTIVITY (µS/cm)	289.6
pH (pH units)	6.98
REDOX (mV)	101.0
TURBIDITY (NTU)	239.20 ***Please note that this reading represents TDS (mg/L) and not Turbidity (NTU).**

HYDROLOGICAL DATA

FLOW MEASUREMENT	Fast
CROSS SECTION WIDTH (m)	30
DEPTH (m)	>1.0
OTHER	

SAMPLE INFORMATION

SAMPLE ID (*one primary sample per row*)	NO. CONTAINERS	DUPLICATE ID (*if applicable*)	DUPLICATE ANALYSIS (*if applicable*)	COMMENT
0026_SW005_250828	4			Extra sample for lab QC

OTHER COMMENTS FOR CONSIDERATION
(e.g. health and safety, access issues, change in location, general observation, notes for future):

SURFACE WATER AND SEDIMENT SAMPLING RECORD

PROJECT NO.:	12626622	**SURFACE WATER ID:**	0026_SW006
PROJECT NAME:	HMAS Albatross OMP	**SEDIMENT ID:**	
CLIENT:	Defence	**DATE:**	28/08/2025 **TIME:** 12:18:00 PM
SITE:	26	**LOGGED BY:**	LR AN

COORDINATES/GPS *(if applicable)*

SAMPLING METHOD *(ie grab, bucket)* **SURFACE WATER:** Grab **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION Outlet of culvert under old braidwood road.

ENVIRONMENTAL OBSERVATIONS

WEATHER	Sunny and Windy
VEGETATION	Veg recently cleared, short grass and reeds
SLOPE	Low
EROSION	bank errosion evident

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	pale brown, low turbidity, no odojr or sheen, pale foam covering surface of pool
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	13.5
DO (mg/L)	12.26
DO (%S)	110.00
CONDUCTIVITY (µS/cm)	406.6
pH (pH units)	7.48
REDOX (mV)	92.5
TURBIDITY (NTU)	336.70 ***Please note that this reading represents TDS (mg/L) and not Turbidity (NTU).**

HYDROLOGICAL DATA

FLOW MEASUREMENT	Fast flow through culvert
CROSS SECTION WIDTH (m)	3.5
DEPTH (m)	0.5
OTHER	

SAMPLE INFORMATION

SAMPLE ID (*one primary sample per row*)	NO. CONTAINERS	DUPLICATE ID (*if applicable*)	DUPLICATE ANALYSIS (*if applicable*)	COMMENT
0026_SW006_250828	2			

OTHER COMMENTS FOR CONSIDERATION

(e.g. health and safety, access issues, change in location, general observation, notes for future): Recently cleared, veg reduced from previous event.

SURFACE WATER AND SEDIMENT SAMPLING RECORD

PROJECT NO.:	12626622	**SURFACE WATER ID:**	0026_SW007
PROJECT NAME:	HMAS Albatross OMP	**SEDIMENT ID:**	
CLIENT:	Defence	**DATE:**	28/08/2025 **TIME:** 9:04:00 AM
SITE:	26	**LOGGED BY:**	LR AN

COORDINATES/GPS *(if applicable)*

SAMPLING METHOD *(ie grab, bucket)* **SURFACE WATER:** Grab **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION Swale of Braidwood Road Drain, near base boundary.

ENVIRONMENTAL OBSERVATIONS

WEATHER	Sunny, windy
VEGETATION	Grass
SLOPE	Low
EROSION	No erosion

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Brown, low turbidity, no odour, brittle bacteria sheen, suspected algea particles
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	10.9
DO (mg/L)	5.82
DO (%S)	52.20
CONDUCTIVITY (µS/cm)	283.5
pH (pH units)	6.50
REDOX (mV)	49.6
TURBIDITY (NTU)	252.20 ***Please note that this reading represents TDS (mg/L) and not Turbidity (NTU).**

HYDROLOGICAL DATA

FLOW MEASUREMENT	None
CROSS SECTION WIDTH (m)	0.5
DEPTH (m)	0.05
OTHER	

SAMPLE INFORMATION

SAMPLE ID (*one primary sample per row*)	NO. CONTAINERS	DUPLICATE ID (*if applicable*)	DUPLICATE ANALYSIS (*if applicable*)	COMMENT
0026_SW007_250828	2	QC100	QC200	

OTHER COMMENTS FOR CONSIDERATION
(e.g. health and safety, access issues, change in location, general observation, notes for future):

SURFACE WATER AND SEDIMENT SAMPLING RECORD

PROJECT NO.:	12626622	**SURFACE WATER ID:**	SW008
PROJECT NAME:	HMAS Albatross OMP	**SEDIMENT ID:**	
CLIENT:	Defence	**DATE:**	28/08/2025 **TIME:** 8:38:24 AM
SITE:	26	**LOGGED BY:**	LR AN

COORDINATES/GPS *(if applicable)*

SAMPLING METHOD *(ie grab, bucket)* **SURFACE WATER:** **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION

ENVIRONMENTAL OBSERVATIONS

WEATHER	sunny,windy
VEGETATION	none
SLOPE	steep banks with shallow slopes
EROSION	errosion evident on stream banks

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Pale brown, low to medium turbidity, no sheen or odour
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	12.1
DO (mg/L)	8.85
DO (%S)	81.70
CONDUCTIVITY (µS/cm)	341.2
pH (pH units)	7.50
REDOX (mV)	101.0
TURBIDITY (NTU)	294.45 ***Please note that this reading represents TDS (mg/L) and not Turbidity (NTU).**

HYDROLOGICAL DATA

FLOW MEASUREMENT	steady, fast flow
CROSS SECTION WIDTH (m)	2
DEPTH (m)	0.01
OTHER	

SAMPLE INFORMATION

SAMPLE ID (*one primary sample per row*)	NO. CONTAINERS	DUPLICATE ID (*if applicable*)	DUPLICATE ANALYSIS (*if applicable*)	COMMENT

OTHER COMMENTS FOR CONSIDERATION
(e.g. health and safety, access issues, change in location, general observation, notes for future):

SURFACE WATER AND SEDIMENT SAMPLING RECORD

PROJECT NO.:	12626622	**SURFACE WATER ID:**	0026_SW009
PROJECT NAME:	HMAS Albatross OMP	**SEDIMENT ID:**	
CLIENT:	Defence	**DATE:**	28/08/2025 **TIME:** 9:36:00 AM
SITE:	26	**LOGGED BY:**	LR AN

COORDINATES/GPS *(if applicable)*

SAMPLING METHOD *(ie grab, bucket)* **SURFACE WATER:** Grab **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION Within water treatment pond

ENVIRONMENTAL OBSERVATIONS

WEATHER	Sunny, windy
VEGETATION	Grass
SLOPE	moderate
EROSION	Not evident

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	pale brown, low turbidity, no odour or sheen
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	12.7
DO (mg/L)	9.31
DO (%S)	87.90
CONDUCTIVITY (µS/cm)	388.0
pH (pH units)	7.27
REDOX (mV)	108.6
TURBIDITY (NTU)	330.85 ***Please note that this reading represents TDS (mg/L) and not Turbidity (NTU).**

HYDROLOGICAL DATA

FLOW MEASUREMENT	NA
CROSS SECTION WIDTH (m)	25
DEPTH (m)	> 0.5
OTHER	

SAMPLE INFORMATION

SAMPLE ID (*one primary sample per row*)	**NO. CONTAINERS**	**DUPLICATE ID** (*if applicable*)	**DUPLICATE ANALYSIS** (*if applicable*)	**COMMENT**
0026_SW009_250828	2			

OTHER COMMENTS FOR CONSIDERATION

(e.g. health and safety, access issues, change in location, general observation, notes for future):

SURFACE WATER AND SEDIMENT SAMPLING RECORD

PROJECT NO.:	12626622	**SURFACE WATER ID:**	0026_SW012
PROJECT NAME:	HMAS Albatross OMP	**SEDIMENT ID:**	
CLIENT:	Defence	**DATE:**	28/08/2025 **TIME:** 10:09:00 AM
SITE:	26	**LOGGED BY:**	LR AN

COORDINATES/GPS *(if applicable)*

SAMPLING METHOD *(ie grab, bucket)* **SURFACE WATER:** Grab **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION Intersection of two streams, collected down stream of junction.

ENVIRONMENTAL OBSERVATIONS

WEATHER	Sunny, Windy
VEGETATION	None
SLOPE	Very steep banks, shallow slope within creek.
EROSION	Errosion evident on banks

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Pale brown, low-moderate turbidity, no odour or sheen
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	11.8
DO (mg/L)	13.32
DO (%S)	112.60
CONDUCTIVITY (µS/cm)	223.7
pH (pH units)	7.60
REDOX (mV)	95.0
TURBIDITY (NTU)	191.75 ***Please note that this reading represents TDS (mg/L) and not Turbidity (NTU).**

HYDROLOGICAL DATA

FLOW MEASUREMENT	Steady fast flow
CROSS SECTION WIDTH (m)	2
DEPTH (m)	0.1
OTHER	

SAMPLE INFORMATION

SAMPLE ID (*one primary sample per row*)	NO. CONTAINERS	DUPLICATE ID (*if applicable*)	DUPLICATE ANALYSIS (*if applicable*)	COMMENT
0026_SW012_250828	2			

OTHER COMMENTS FOR CONSIDERATION
(e.g. health and safety, access issues, change in location, general observation, notes for future):

SURFACE WATER AND SEDIMENT SAMPLING RECORD

PROJECT NO.:	12626622	**SURFACE WATER ID:**	0026_SW013
PROJECT NAME:	HMAS Albatross OMP	**SEDIMENT ID:**	
CLIENT:	Defence	**DATE:**	28/08/2025 **TIME:** 2:42:00 PM
SITE:	26	**LOGGED BY:**	LR AN

COORDINATES/GPS *(if applicable)*

SAMPLING METHOD *(ie grab, bucket)* **SURFACE WATER:** Grab **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION Under bridge of Parma Rd

ENVIRONMENTAL OBSERVATIONS

WEATHER	Windy, Sunny
VEGETATION	Grasses and weeds on creek banks
SLOPE	Low
EROSION	Moderate on creek banks

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Pale brown, moderate-high turbidity, no odour or sheen
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	13.8
DO (mg/L)	8.40
DO (%S)	80.30
CONDUCTIVITY (µS/cm)	336.3
pH (pH units)	7.44
REDOX (mV)	106.0
TURBIDITY (NTU)	278.20 ***Please note that this reading represents TDS (mg/L) and not Turbidity (NTU).**

HYDROLOGICAL DATA

FLOW MEASUREMENT	Moderate
CROSS SECTION WIDTH (m)	5 m
DEPTH (m)	>0.5 m
OTHER	

SAMPLE INFORMATION

SAMPLE ID (*one primary sample per row*)	NO. CONTAINERS	DUPLICATE ID (*if applicable*)	DUPLICATE ANALYSIS (*if applicable*)	COMMENT
0026_SW013_250828	2			

OTHER COMMENTS FOR CONSIDERATION
(e.g. health and safety, access issues, change in location, general observation, notes for future):

SURFACE WATER AND SEDIMENT SAMPLING RECORD

PROJECT NO.:	12626622	**SURFACE WATER ID:**	SW014
PROJECT NAME:	HMAS Albatross OMP	**SEDIMENT ID:**	
CLIENT:	Defence	**DATE:**	28/08/2025 **TIME:** 12:00:00 AM
SITE:	26	**LOGGED BY:**	LR AN

COORDINATES/GPS *(if applicable)*

SAMPLING METHOD *(ie grab, bucket)* **SURFACE WATER:** **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION fast moving stream above fall, parma creek

ENVIRONMENTAL OBSERVATIONS

WEATHER	sunny, windy
VEGETATION	NA
SLOPE	stepping gradient of rock bar
EROSION	NA

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	clear, no turbidity, sheen or odour
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	13.4
DO (mg/L)	10.52
DO (%S)	99.60
CONDUCTIVITY (µS/cm)	141.6
pH (pH units)	6.52
REDOX (mV)	88.9
TURBIDITY (NTU)	118.30 ***Please note that this reading represents TDS (mg/L) and not Turbidity (NTU).**

HYDROLOGICAL DATA

FLOW MEASUREMENT	high
CROSS SECTION WIDTH (m)	10
DEPTH (m)	0.2
OTHER	

SAMPLE INFORMATION

SAMPLE ID (*one primary sample per row*)	NO. CONTAINERS	DUPLICATE ID (*if applicable*)	DUPLICATE ANALYSIS (*if applicable*)	COMMENT

OTHER COMMENTS FOR CONSIDERATION
(e.g. health and safety, access issues, change in location, general observation, notes for future):

SURFACE WATER AND SEDIMENT SAMPLING RECORD

PROJECT NO.:	12626622	**SURFACE WATER ID:**	0026_SW018
PROJECT NAME:	HMAS Albatross OMP	**SEDIMENT ID:**	
CLIENT:	Defence	**DATE:**	28/08/2025 **TIME:** 8:30:00 AM
SITE:	26	**LOGGED BY:**	LR AN

COORDINATES/GPS *(if applicable)*

SAMPLING METHOD *(ie grab, bucket)* **SURFACE WATER:** Grab **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION Swale drain, pool of water

ENVIRONMENTAL OBSERVATIONS

WEATHER	Windy, Sunny
VEGETATION	Grass
SLOPE	Low
EROSION	minor errosion on side of swale

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	pale brown, moderate turbidity, no odour or sheen
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	9.4
DO (mg/L)	9.98
DO (%S)	87.80
CONDUCTIVITY (µS/cm)	252.1
pH (pH units)	6.73
REDOX (mV)	135.5
TURBIDITY (NTU)	232.05 ***Please note that this reading represents TDS (mg/L) and not Turbidity (NTU).**

HYDROLOGICAL DATA

FLOW MEASUREMENT	None
CROSS SECTION WIDTH (m)	1
DEPTH (m)	0.4
OTHER	

SAMPLE INFORMATION

SAMPLE ID (*one primary sample per row*)	**NO. CONTAINERS**	**DUPLICATE ID** (*if applicable*)	**DUPLICATE ANALYSIS** (*if applicable*)	**COMMENT**
0026_SW018_250828	4			

OTHER COMMENTS FOR CONSIDERATION

(e.g. health and safety, access issues, change in location, general observation, notes for future): Extra sample for lab QC

SURFACE WATER AND SEDIMENT SAMPLING RECORD

PROJECT NO.:	12626622	**SURFACE WATER ID:**	SW020
PROJECT NAME:	HMAS Albatross OMP	**SEDIMENT ID:**	
CLIENT:	Defence	**DATE:**	28/08/2025 **TIME:** 8:38:24 AM
SITE:	26	**LOGGED BY:**	LR AN

COORDINATES/GPS *(if applicable)*

SAMPLING METHOD *(ie grab, bucket)* **SURFACE WATER:** **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION upstream of triple barrel culvert

ENVIRONMENTAL OBSERVATIONS

WEATHER	sunny, windy
VEGETATION	NA
SLOPE	moderate
EROSION	erosion evident along bank stream

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	clear, no turbidity, no odour or sheen
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	12.4
DO (mg/L)	8.86
DO (%S)	83.10
CONDUCTIVITY (µS/cm)	172.2
pH (pH units)	7.07
REDOX (mV)	102.4
TURBIDITY (NTU)	147.55 ***Please note that this reading represents TDS (mg/L) and not Turbidity (NTU).**

HYDROLOGICAL DATA

FLOW MEASUREMENT	moderately steady flow
CROSS SECTION WIDTH (m)	3
DEPTH (m)	0.1
OTHER	

SAMPLE INFORMATION

SAMPLE ID (*one primary sample per row*)	**NO. CONTAINERS**	**DUPLICATE ID** (*if applicable*)	**DUPLICATE ANALYSIS** (*if applicable*)	**COMMENT**

OTHER COMMENTS FOR CONSIDERATION
(e.g. health and safety, access issues, change in location, general observation, notes for future):

SURFACE WATER AND SEDIMENT SAMPLING RECORD

PROJECT NO.:	12626622	**SURFACE WATER ID:**	0026_SW049
PROJECT NAME:	HMAS Albatross OMP	**SEDIMENT ID:**	
CLIENT:	Defence	**DATE:**	28/08/2025 **TIME:** 2:24:00 AM
SITE:	26	**LOGGED BY:**	LR AN

COORDINATES/GPS *(if applicable)*

SAMPLING METHOD *(ie grab, bucket)* **SURFACE WATER:** Grab **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION Creek deeply incised in surrounding topography, very steep banks, convergency of two gullies.

ENVIRONMENTAL OBSERVATIONS

WEATHER	sunny, windy
VEGETATION	grass
SLOPE	steep
EROSION	errosion evident on banks

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	pale brown, low turbidity, no odour or sheen
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	12.1
DO (mg/L)	33.50
DO (%S)	312.90
CONDUCTIVITY (µS/cm)	649.0
pH (pH units)	7.39
REDOX (mV)	109.5
TURBIDITY (NTU)	559.00 ***Please note that this reading represents TDS (mg/L) and not Turbidity (NTU).**

HYDROLOGICAL DATA

FLOW MEASUREMENT	moderate
CROSS SECTION WIDTH (m)	1
DEPTH (m)	0.3
OTHER	

SAMPLE INFORMATION

SAMPLE ID (*one primary sample per row*)	NO. CONTAINERS	DUPLICATE ID (*if applicable*)	DUPLICATE ANALYSIS (*if applicable*)	COMMENT
0026_SW049_250828	2			

OTHER COMMENTS FOR CONSIDERATION
(e.g. health and safety, access issues, change in location, general observation, notes for future): Very very steep, difficult access.

SURFACE WATER AND SEDIMENT SAMPLING RECORD

PROJECT NO.:	12626622	**SURFACE WATER ID:**	0026_SW106
PROJECT NAME:	HMAS Albatross OMP	**SEDIMENT ID:**	
CLIENT:	Defence	**DATE:**	28/08/2025 **TIME:** 9:23:00 AM
SITE:	26	**LOGGED BY:**	LR AN

COORDINATES/GPS *(if applicable)*

SAMPLING METHOD *(ie grab, bucket)* **SURFACE WATER:** Grab **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION Pool below culvert outflow, surrounded by blackberries

ENVIRONMENTAL OBSERVATIONS

WEATHER	Sunny, Windy
VEGETATION	Blackberry and Lantana
SLOPE	moderate
EROSION	

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Clear, no odour or sheen, non-turbid
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	10.6
DO (mg/L)	9.93
DO (%S)	88.70
CONDUCTIVITY (µS/cm)	342.2
pH (pH units)	7.56
REDOX (mV)	106.0
TURBIDITY (NTU)	306.80 ***Please note that this reading represents TDS (mg/L) and not Turbidity (NTU).**

HYDROLOGICAL DATA

FLOW MEASUREMENT	Slow trickle
CROSS SECTION WIDTH (m)	0.5
DEPTH (m)	0.1
OTHER	

SAMPLE INFORMATION

SAMPLE ID (*one primary sample per row*)	NO. CONTAINERS	DUPLICATE ID (*if applicable*)	DUPLICATE ANALYSIS (*if applicable*)	COMMENT
0026_SW106_250828	2			

OTHER COMMENTS FOR CONSIDERATION
(e.g. health and safety, access issues, change in location, general observation, notes for future):

SURFACE WATER AND SEDIMENT SAMPLING RECORD

PROJECT NO.:	12626622	**SURFACE WATER ID:**	0026_SW123
PROJECT NAME:	HMAS Albatross OMP	**SEDIMENT ID:**	
CLIENT:	Defence	**DATE:**	28/08/2025 **TIME:** 1:12:00 AM
SITE:	26	**LOGGED BY:**	LR AN

COORDINATES/GPS *(if applicable)*

SAMPLING METHOD *(ie grab, bucket)* **SURFACE WATER:** Grab **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION stream at base of hill

ENVIRONMENTAL OBSERVATIONS

WEATHER	sunny, windy
VEGETATION	grass, trees
SLOPE	low
EROSION	erosion evident on bank stream

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	pale brown, low to medium turbidity, no odour or sheen
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	12.0
DO (mg/L)	9.43
DO (%S)	86.20
CONDUCTIVITY (µS/cm)	196.1
pH (pH units)	6.72
REDOX (mV)	116.9
TURBIDITY (NTU)	169.65 ***Please note that this reading represents TDS (mg/L) and not Turbidity (NTU).**

HYDROLOGICAL DATA

FLOW MEASUREMENT	NA
CROSS SECTION WIDTH (m)	5
DEPTH (m)	0.5
OTHER	

SAMPLE INFORMATION

SAMPLE ID (*one primary sample per row*)	**NO. CONTAINERS**	**DUPLICATE ID** (*if applicable*)	**DUPLICATE ANALYSIS** (*if applicable*)	**COMMENT**
0026_SW123_250828	2			

OTHER COMMENTS FOR CONSIDERATION
(e.g. health and safety, access issues, change in location, general observation, notes for future):

SURFACE WATER AND SEDIMENT SAMPLING RECORD

PROJECT NO.:	12626622	**SURFACE WATER ID:**	SW124
PROJECT NAME:	HMAS Albatross OMP	**SEDIMENT ID:**	
CLIENT:	Defence	**DATE:**	28/08/2025 **TIME:** 1:55:12 PM
SITE:	26	**LOGGED BY:**	LR AN

COORDINATES/GPS *(if applicable)*

SAMPLING METHOD *(ie grab, bucket)* **SURFACE WATER:** **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION Outlet of double barrel box culvert. Culvert under Braidwood Rd

ENVIRONMENTAL OBSERVATIONS

WEATHER	sunny, windy
VEGETATION	grass, reeds, algae
SLOPE	NA
EROSION	erosion evident along bank stream

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	brown, low turbidity, no odour or sheen
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	14.0
DO (mg/L)	11.69
DO (%S)	114.30
CONDUCTIVITY (µS/cm)	989.0
pH (pH units)	7.78
REDOX (mV)	100.2
TURBIDITY (NTU)	812.50 ***Please note that this reading represents TDS (mg/L) and not Turbidity (NTU).**

HYDROLOGICAL DATA

FLOW MEASUREMENT	slow, steady stream
CROSS SECTION WIDTH (m)	1.5
DEPTH (m)	0.04
OTHER	

SAMPLE INFORMATION

SAMPLE ID (*one primary sample per row*)	NO. CONTAINERS	DUPLICATE ID (*if applicable*)	DUPLICATE ANALYSIS (*if applicable*)	COMMENT
0026_SW124_250828	2	QC101	QC201	

OTHER COMMENTS FOR CONSIDERATION
(e.g. health and safety, access issues, change in location, general observation, notes for future):

SURFACE WATER AND SEDIMENT SAMPLING RECORD

PROJECT NO.:	12626622	**SURFACE WATER ID:**	0026_SW185
PROJECT NAME:	HMAS Albatross OMP	**SEDIMENT ID:**	
CLIENT:	Defence	**DATE:**	28/08/2025 **TIME:** 11:26:00 AM
SITE:	26	**LOGGED BY:**	LR AN

COORDINATES/GPS *(if applicable)*

SAMPLING METHOD *(ie grab, bucket)* **SURFACE WATER:** Grab **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION Creek crossing, just up stream of junction with other gully

ENVIRONMENTAL OBSERVATIONS

WEATHER	Windy, sunny
VEGETATION	Paperbark trees, no veg in creek
SLOPE	Low
EROSION	lots of errosion on creek banks

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Mostly clear, pale brown tinge, no odour or sheen
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	11.8
DO (mg/L)	9.34
DO (%S)	85.60
CONDUCTIVITY (µS/cm)	625.0
pH (pH units)	7.32
REDOX (mV)	111.8
TURBIDITY (NTU)	546.00 ***Please note that this reading represents TDS (mg/L) and not Turbidity (NTU).**

HYDROLOGICAL DATA

FLOW MEASUREMENT	moderate
CROSS SECTION WIDTH (m)	1
DEPTH (m)	0.1
OTHER	

SAMPLE INFORMATION

SAMPLE ID (*one primary sample per row*)	NO. CONTAINERS	DUPLICATE ID (*if applicable*)	DUPLICATE ANALYSIS (*if applicable*)	COMMENT
0026_SW185_250828	2			

OTHER COMMENTS FOR CONSIDERATION
(e.g. health and safety, access issues, change in location, general observation, notes for future):

SURFACE WATER AND SEDIMENT SAMPLING RECORD

PROJECT NO.:	12626622	**SURFACE WATER ID:**	0026_SW187
PROJECT NAME:	HMAS Albatross OMP	**SEDIMENT ID:**	
CLIENT:	Defence	**DATE:**	28/08/2025 **TIME:** 4:12:00 PM
SITE:	26	**LOGGED BY:**	LR AN

COORDINATES/GPS *(if applicable)*

SAMPLING METHOD *(ie grab, bucket)* **SURFACE WATER:** Grab **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION Culvert outlet under road, pool beneth.

ENVIRONMENTAL OBSERVATIONS

WEATHER	Clear, Sunny
VEGETATION	Grass and lantana
SLOPE	low-moderate
EROSION	Moderate

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Pale brown, moderate turbidity, no odour or sheen
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	13.4
DO (mg/L)	8.52
DO (%S)	81.10
CONDUCTIVITY (µS/cm)	149.0
pH (pH units)	6.98
REDOX (mV)	109.0
TURBIDITY (NTU)	124.80 ***Please note that this reading represents TDS (mg/L) and not Turbidity (NTU).**

HYDROLOGICAL DATA

FLOW MEASUREMENT	Steady trickle
CROSS SECTION WIDTH (m)	3
DEPTH (m)	0.5
OTHER	

SAMPLE INFORMATION

SAMPLE ID (*one primary sample per row*)	NO. CONTAINERS	DUPLICATE ID (*if applicable*)	DUPLICATE ANALYSIS (*if applicable*)	COMMENT
0026_SW187_250828	2			

OTHER COMMENTS FOR CONSIDERATION
(e.g. health and safety, access issues, change in location, general observation, notes for future):

Crossing above culvert appears to be private property.

Pull up at gate approx 50 m from crossing and walk dowm easement

SURFACE WATER AND SEDIMENT SAMPLING RECORD

PROJECT NO.:	12626622	**SURFACE WATER ID:**	0026_SW188
PROJECT NAME:	HMAS Albatross OMP	**SEDIMENT ID:**	
CLIENT:	Defence	**DATE:**	28/08/2025 **TIME:** 7:40:48 AM
SITE:	26	**LOGGED BY:**	LR AN

COORDINATES/GPS *(if applicable)*

SAMPLING METHOD *(ie grab, bucket)* **SURFACE WATER:** Grab **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION along river

ENVIRONMENTAL OBSERVATIONS

WEATHER	sunny, windy
VEGETATION	grass
SLOPE	NA
EROSION	erosion evident along embankment

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	brown, low-moderate turbidity, no odour or sheen
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	13.5
DO (mg/L)	10.27
DO (%S)	98.70
CONDUCTIVITY (µS/cm)	164.5
pH (pH units)	6.54
REDOX (mV)	106.0
TURBIDITY (NTU)	137.15 ***Please note that this reading represents TDS (mg/L) and not Turbidity (NTU).**

HYDROLOGICAL DATA

FLOW MEASUREMENT	low, steady flow
CROSS SECTION WIDTH (m)	20
DEPTH (m)	0.5
OTHER	

SAMPLE INFORMATION

SAMPLE ID (*one primary sample per row*)	NO. CONTAINERS	DUPLICATE ID (*if applicable*)	DUPLICATE ANALYSIS (*if applicable*)	COMMENT
0026_SW188_250828	4			Extra sample for lab QC

OTHER COMMENTS FOR CONSIDERATION
(e.g. health and safety, access issues, change in location, general observation, notes for future):

Access difficult. Had to walk alrong river past properties backing onto river.

sample collected approx 200m DS of Coordinates. Felt uneasy and like we were trespassing.

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→ The Power of Commitment

Appendix G

Interpretive graphs and tables

Groundwater

Interpretive tables

Table G1 Calculated "R squared" for PFOA – Groundwater

Location	# of samples	R^2	Max	Min	Median	St Dev	Comment
MW001	11	0.00	0.01	0.01	0.01	0.00	No real trend, <LOR
MW002	12	0.13	0.05	0.01	0.01	0.01	
MW003	10	0.00	0.01	0.01	0.01	0.00	No real trend, <LOR
MW004	9	1.00	0.01	0.01	0.01	0.00	No real trend, <LOR
MW005	11	0.32	0.68	0.28	0.43	0.15	
MW006	11	0.50	0.36	0.12	0.21	0.08	
MW008	11	0.06	0.83	0.08	0.28	0.20	
MW009	13	0.40	7.6	0.03	0.42	2.09	
MW009P	13	0.22	23.1	3.40	10.00	5.04	
MW012	12	0.00	0.01	0.01	0.01	0.00	No real trend, <LOR
MW012P	11	0.00	0.04	0.01	0.01	0.01	No real trend, <LOR
MW015	11	0.13	0.48	0.01	0.07	0.17	
MW016	11	0.00	0.01	0.01	0.01	0.00	
MW017	11	0.61	0.49	0.01	0.07	0.17	
MW018	14	0.07	0.11	0.01	0.01	0.03	
MW024	11	0.07	0.03	0.01	0.01	0.01	
MW026	11	0.00	0.14	0.08	0.11	0.02	
MW029	11	0.00	0.5	0.06	0.18	0.17	
MW031	9	1.00	0.01	0.01	0.01	0.00	No real trend, <LOR
MW038	9	1.00	0.01	0.01	0.01	0.00	No real trend, <LOR
MW039	9	1.00	0.01	0.01	0.01	0.00	No real trend, <LOR
MW044	8	0.33	0.54	0.01	0.32	0.23	
MW045	9	1.00	0.01	0.01	0.01	0.00	No real trend, <LOR
MW072	6	1.00	0.01	0.01	0.01	0.00	No real trend, <LOR
MW073	6	1.00	0.01	0.01	0.01	0.00	No real trend, <LOR
MW104	2	1.00	7.78	5.78	6.78	1.41	No real trend, two samples
MW117	1	0.00	0.02	0.02	0.02	-	No real trend, one sample
MW213	1	0.00	0.21	0.18	0.21	-	No real trend, one sample

Red = R^2 ≥0.70

Table G2 Calculated "R squared" for PFOS – Groundwater

Location	# of samples	R^2	Max	Min	Median	St Dev	Comment
MW001	11	0.46	0.76	0.01	0.01	0.26	
MW002	12	0.12	0.12	0.01	0.01	0.03	
MW003	10	0.00	0.02	0.01	0.01	0.00	
MW004	9	0.05	0.02	0.01	0.01	0.00	
MW005	11	0.33	22.90	2.00	7.88	7.61	
MW006	11	0.62	15.00	4.45	8.11	4.05	
MW008	11	0.00	12.70	0.95	3.10	3.10	
MW009	13	0.34	94.50	0.66	2.30	25.83	
MW009P	13	0.45	496.00	87.90	320.00	119.31	
MW012	12	0.02	0.37	0.01	0.01	0.10	
MW012P	11	0.01	2.63	0.03	0.24	0.76	
MW015	11	0.01	6.40	0.01	1.29	2.19	
MW016	11	0.00	0.09	0.01	0.01	0.02	
MW017	11	0.64	4.21	0.01	0.41	1.49	
MW018	14	0.07	3.30	0.01	0.01	0.88	
MW024	11	0.01	0.62	0.01	0.17	0.20	
MW026	11	0.57	3.60	0.83	1.80	0.96	
MW029	11	0.02	10.50	0.35	3.00	3.25	
MW031	9	1.00	0.01	0.01	0.01	0.00	No real trend, <LOR
MW038	9	0.35	0.09	0.01	0.01	0.03	
MW039	9	0.29	0.05	0.01	0.01	0.02	
MW044	8	0.03	0.69	0.02	0.12	0.29	
MW045	9	0.04	0.12	0.02	0.04	0.03	
MW072	6	0.33	0.13	0.01	0.01	0.05	
MW073	6	1.00	0.01	0.01	0.01	0.00	No real trend, <LOR
MW104	2	1.00	176.00	72.20	124.10	73.40	No real trend, two samples
MW117	1	0.00	0.43	0.43	0.43	-	No real trend, one sample
MW213	1	0.00	4.53	3.44	4.53	-	No real trend, one sample

Red = $R^2 \geq 0.70$

Table G3 Calculated "R squared" for PFOS+PFHxS – Groundwater

Location	# of samples	R^2	Max	Min	Median	St Dev	Comment
MW001	11	0.44	1.01	0.01	0.01	0.33	
MW002	12	0.12	0.12	0.01	0.01	0.03	
MW003	10	0.08	0.02	0.01	0.01	0.00	
MW004	9	0.05	0.02	0.01	0.01	0.00	
MW005	11	0.28	35.30	4.80	13.80	11.24	
MW006	11	0.71	22.60	7.12	13.20	5.82	Decreasing trend
MW008	11	0.08	37.00	2.69	15.70	9.40	
MW009	13	0.41	141.00	0.89	5.40	39.08	
MW009P	13	0.45	616.00	112.00	400.00	145.26	
MW012	12	0.05	0.39	0.01	0.01	0.11	
MW012P	11	0.01	4.08	0.03	0.41	1.18	
MW015	11	0.08	27.40	0.03	5.23	10.16	
MW016	11	0.00	0.09	0.01	0.01	0.02	
MW017	11	0.69	21.00	0.01	2.94	7.96	
MW018	14	0.07	5.00	0.01	0.01	1.33	
MW024	11	0.07	1.62	0.01	0.35	0.48	
MW026	11	0.44	5.80	2.27	4.27	1.10	
MW029	11	0.00	21.60	1.00	5.40	7.92	
MW031	9	0.34	0.10	0.01	0.04	0.03	
MW038	9	0.22	0.13	0.01	0.04	0.04	
MW039	9	0.25	0.05	0.01	0.01	0.02	
MW044	8	0.26	17.00	0.09	8.17	7.21	
MW045	9	0.05	0.30	0.09	0.15	0.07	
MW072	6	0.27	0.13	0.01	0.01	0.05	
MW073	6	1.00	0.01	0.01	0.01	0.00	No real trend <LOR
MW104	2	1.00	270.00	155.00	212.50	81.32	No real trend, two samples
MW117	1	0.00	1.00	1.00	1.00	-	No real trend, one sample
MW213	1	0.00	10.30	8.25	10.30	-	No real trend, one sample

Red = $R^2 \geq 0.70$

Table G4 Calculated "R squared" for PFBS – Groundwater

Location	# of samples	R^2	Max	Min	Median	St Dev	Comment
MW001	11	0.77	0.02	0.01	0.02	0.01	No real trend <LOR
MW002	12	0	1.04	0.01	0.02	0.3	
MW003	10	0.74	0.02	0.01	0.02	0.005	No real trend <LOR
MW004	9	0.83	0.02	0.01	0.02	0.01	No real trend <LOR
MW005	11	0.03	1.54	0.72	1.	0.29	
MW006	11	0.41	1.1	0.2	0.34	0.33	
MW008	11	0	3.58	0.26	1.3	0.89	
MW009	13	0.21	10.2	0.03	1.1	3.76	
MW009P	13	0.28	17.5	2.91	9.8	4.13	
MW012	12	0.75	0.02	0.01	0.02	0.005	No real trend <LOR
MW012P	11	0.04	0.2	0.01	0.02	0.06	
MW015	11	0.09	3.5	0.02	0.54	1.29	
MW016	11	0.77	0.02	0.01	0.02	0.01	No real trend <LOR
MW017	11	0.53	2.01	0.01	0.41	0.78	
MW018	14	0	0.72	0.01	0.02	0.19	
MW024	11	0.03	0.07	0.01	0.02	0.02	
MW026	11	0	1.04	0.28	0.42	0.24	
MW029	11	0.02	5.74	0.17	1.8	2.12	
MW031	9	0.08	0.2	0.07	0.12	0.04	
MW038	9	0.51	0.03	0.01	0.02	0.01	
MW039	9	0.64	0.02	0.01	0.02	0	
MW044	8	0.69	5.1	0.01	3.415	2.11	Decreasing trend
MW045	9	0.65	0.02	0.01	0.02	0	
MW072	6	1	0.02	0.02	0.02	0	No real trend <LOR
MW073	6	1	0.02	0.01	0.02	0	No real trend <LOR
MW104	2	1	10.3	9.61	9.955	0.49	No real trend, two samples
MW117	1	0	0.07	0.07	0.07	-	No real trend, one sample
MW213	1	0	0.72	0.63	0.72	-	No real trend, one sample

Red = $R^2 \geq 0.70$

Interpretive graphs

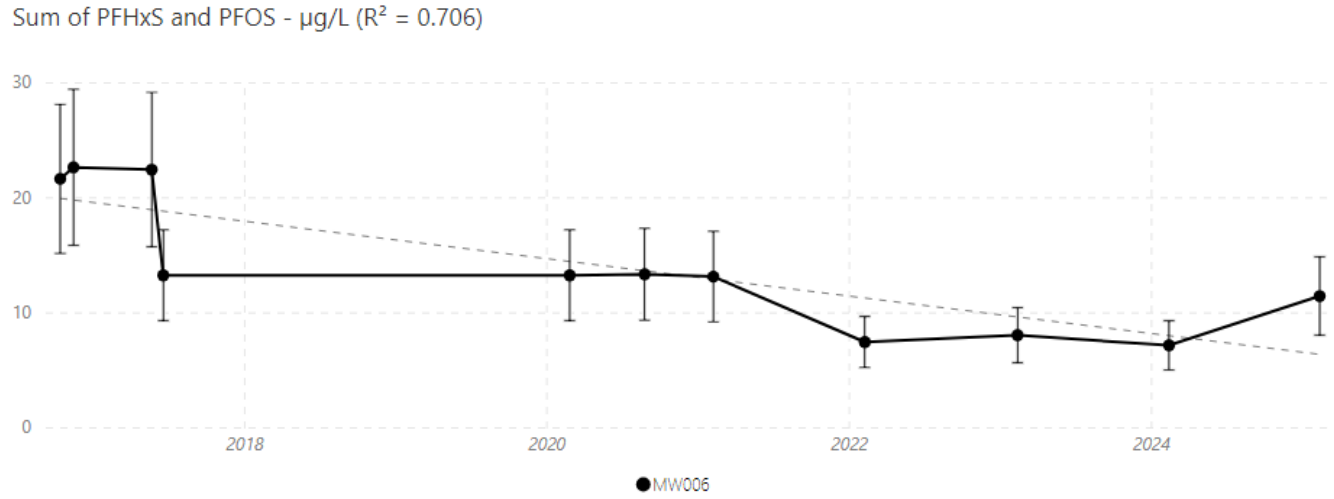

Diagram G1 Statistically significant trends in groundwater – MW006 – PFOS+PFHxS

Box and Whisker Plots

Braidwood Road Drain – 7 locations, 103 samples

Source	Pathway	Receptor
MW001 MW002 MW012	MW018 MW044	MW024 MW031
**MW012P within the perched aquifer has been excluded*		

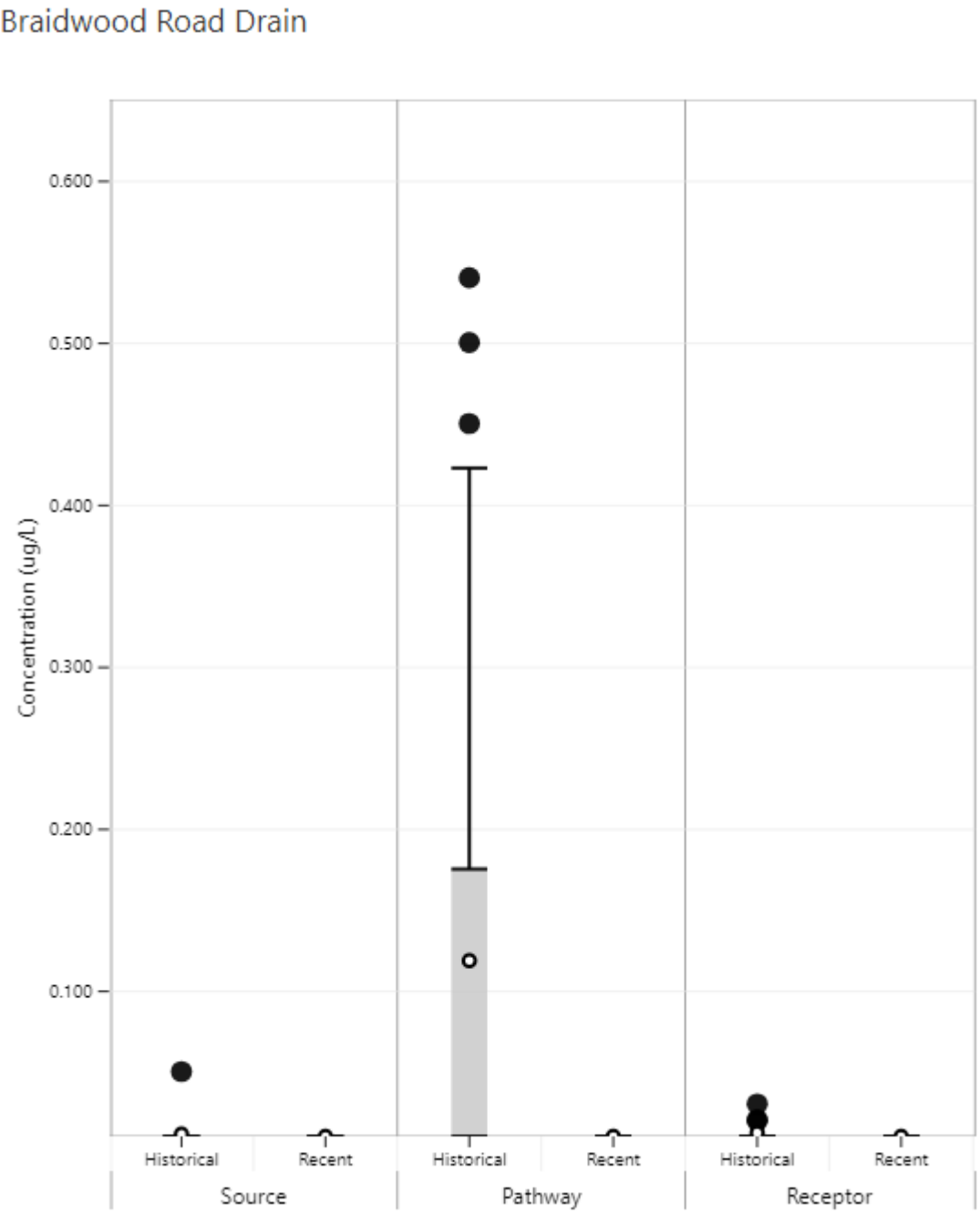

Diagram G2 ***Box and Whisker Plot – Groundwater – PFOA – Braidwood Road Drain***

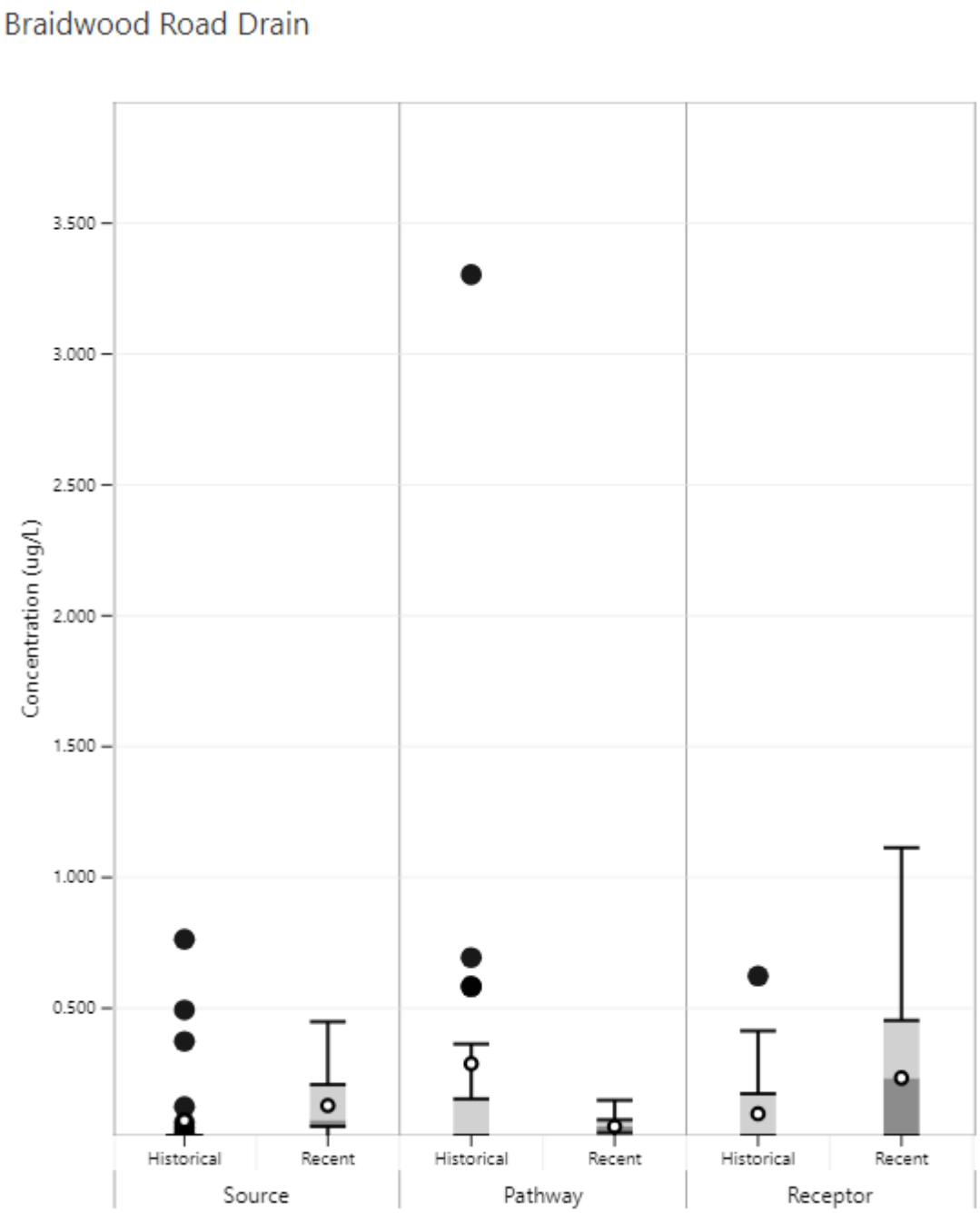

Diagram G3 Box and Whisker Plot – Groundwater – PFOS – Braidwood Road Drain

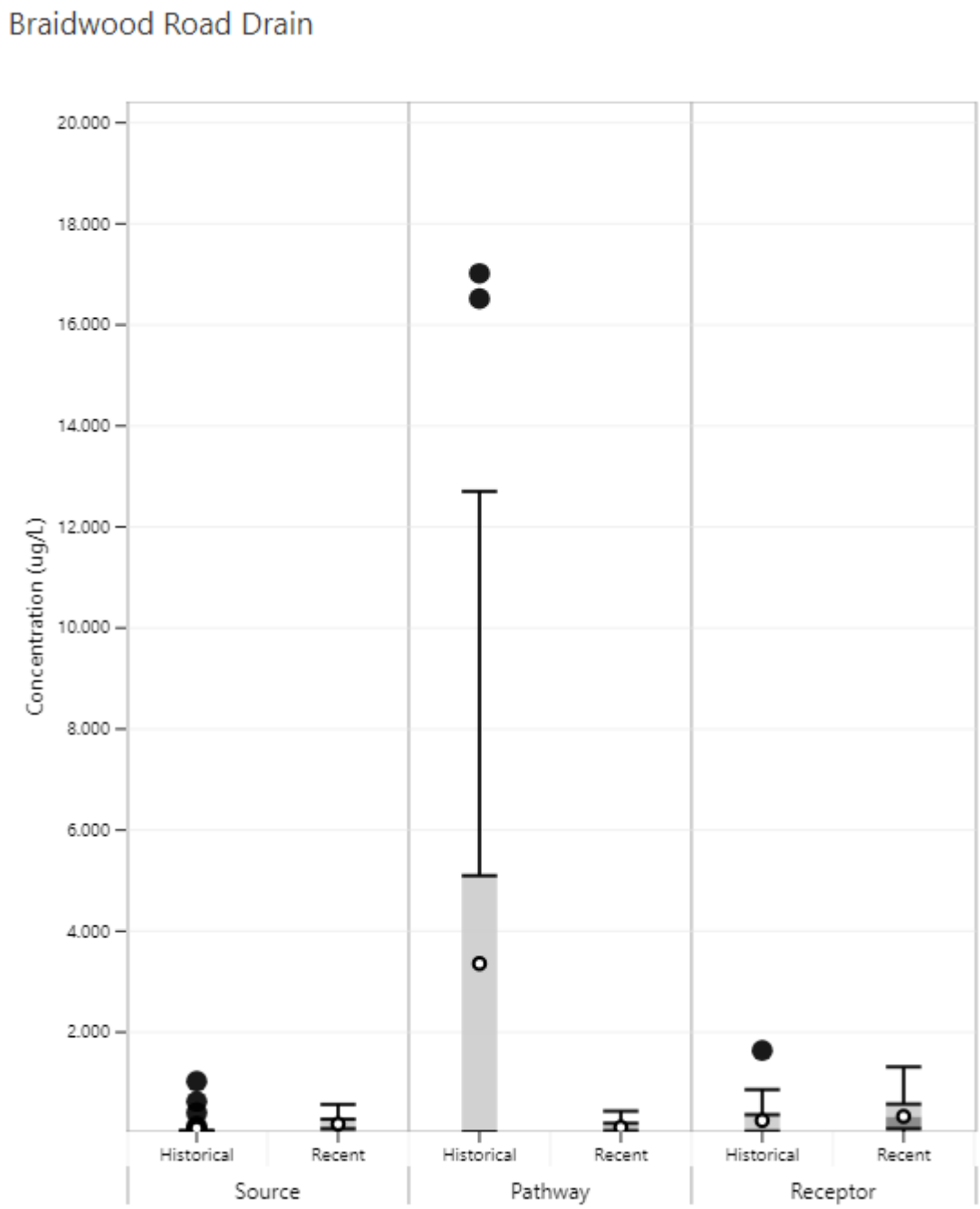

Diagram G4 Box and Whisker Plot – Groundwater – PFOS+PFHxS – Braidwood Road Drain

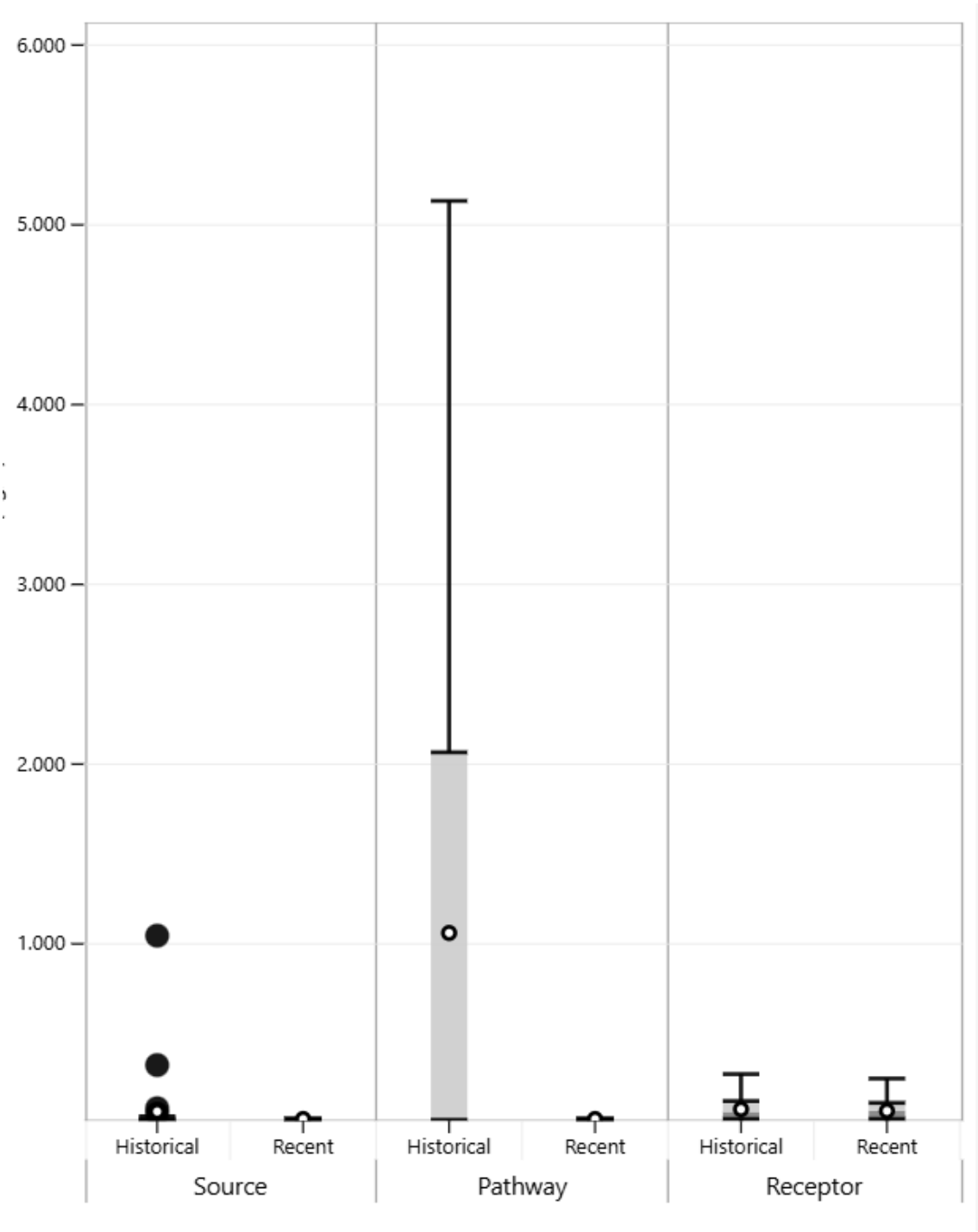

Diagram G5 Box and Whisker Plot – Groundwater – PFBS – Braidwood Road Drain

Upper Currambene Creek and Yerriyong Gully – 18 locations, 169 samples

Source	Pathway	Receptor
Currambene Creek		
MW005 MW117 MW029 MW213 MW104	MW030 (historical only) MW038	MW003 MW026
Yerriyong Gully		
MW006 MW016 MW008 MW017 MW009 MW045 MW015 MW046 (historical only)	MW039	-
**MW009P within the perched aquifer has been excluded*		

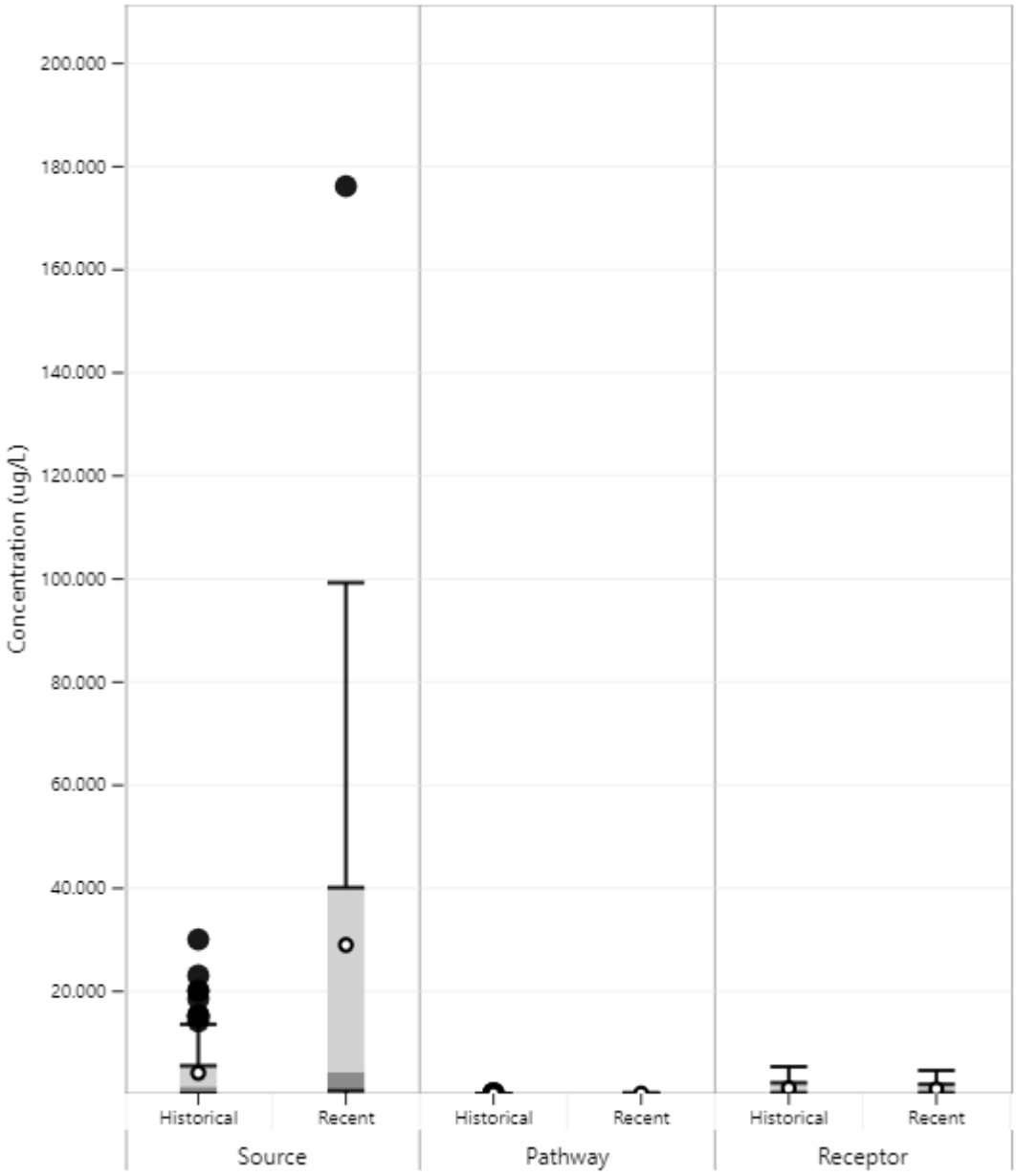

Diagram G6 Box and Whisker Plot – Groundwater – PFOA – Upper Currambene Creek and Yerriyong Gully

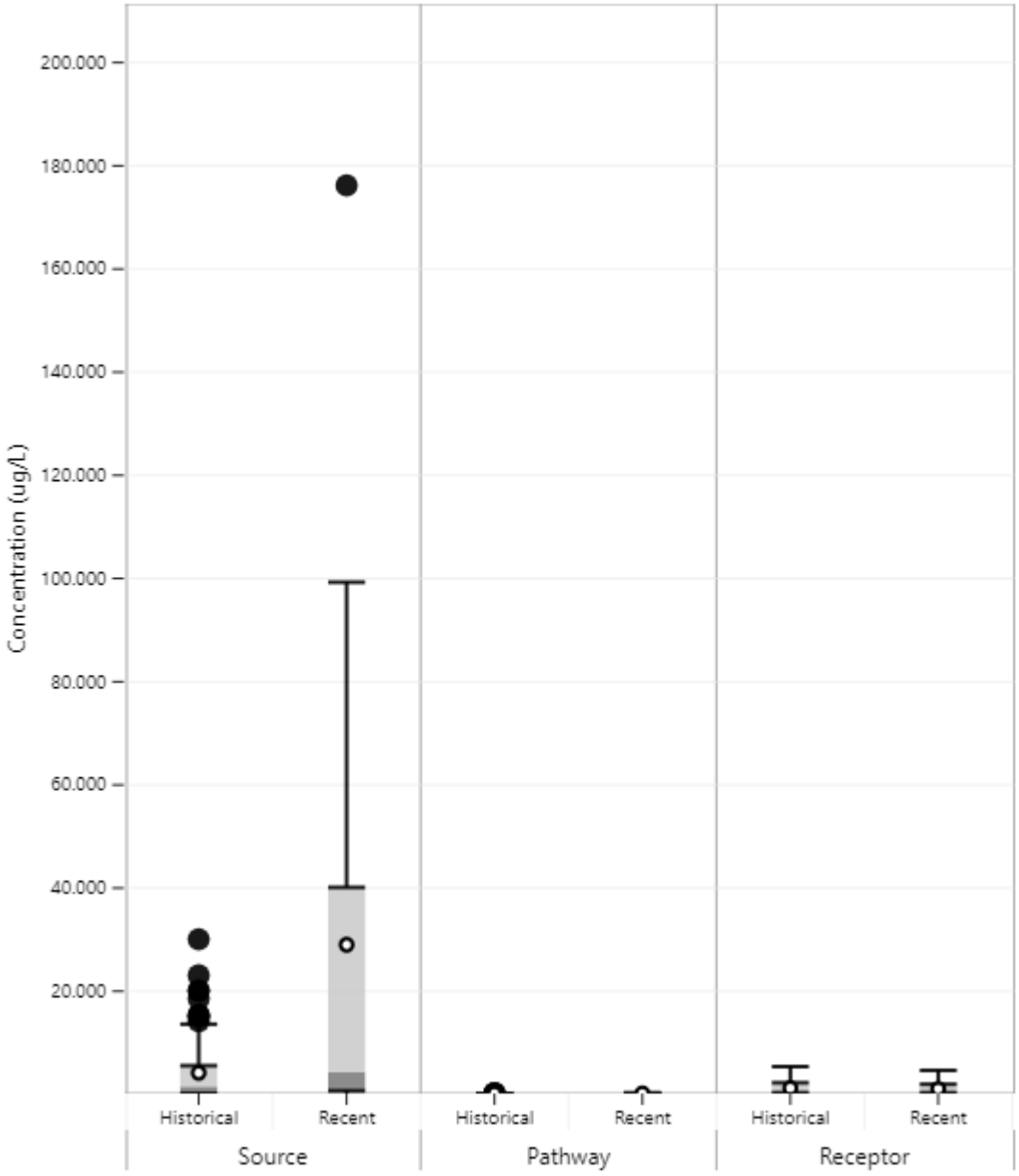

Diagram G7 Box and Whisker Plot – Groundwater – PFOS – Upper Currambene Creek and Yerriyong Gully

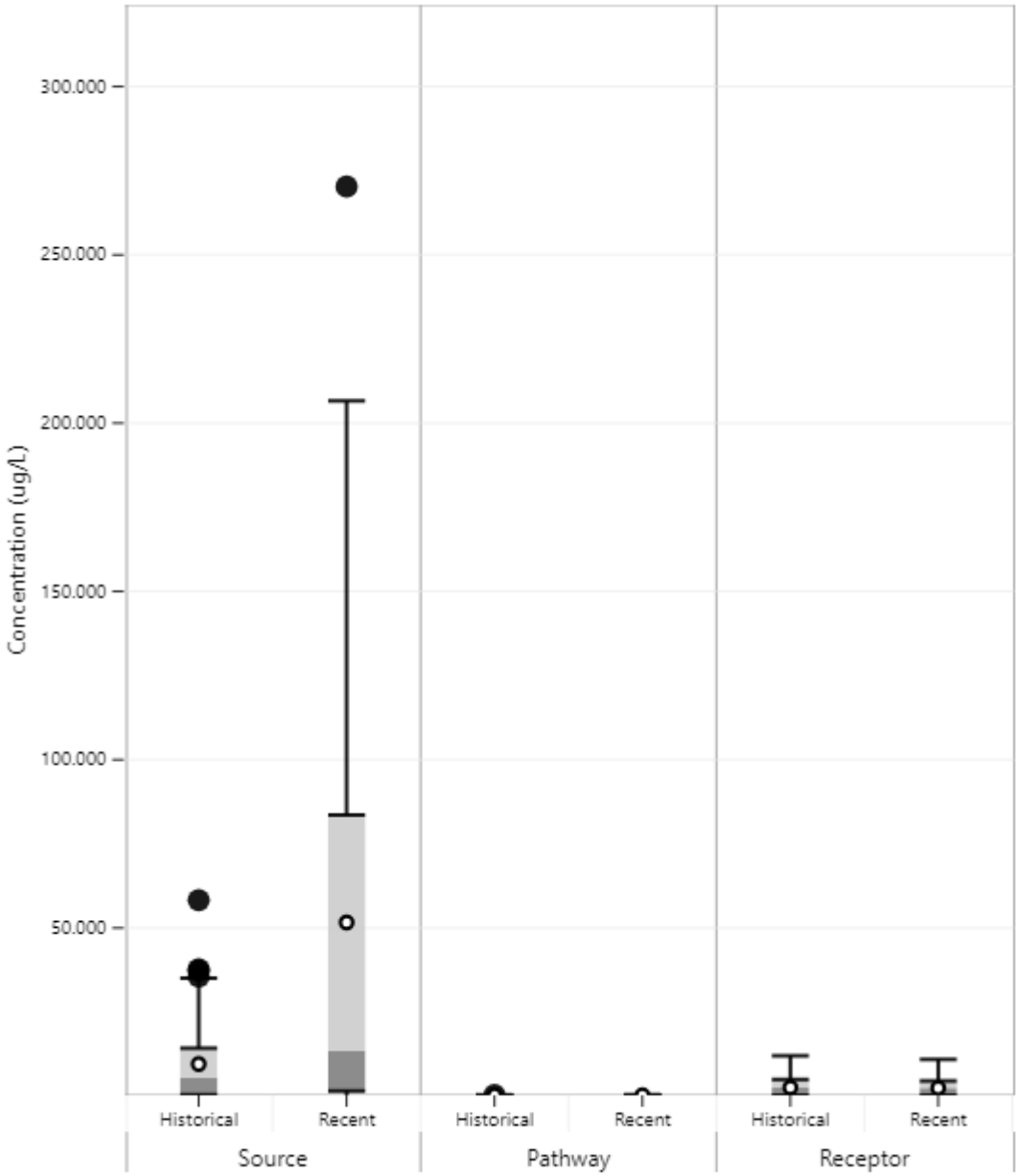

Diagram G8 Box and Whisker Plot – Groundwater – PFOS+PFHxS – Upper Currambene Creek and Yerriyong Gully

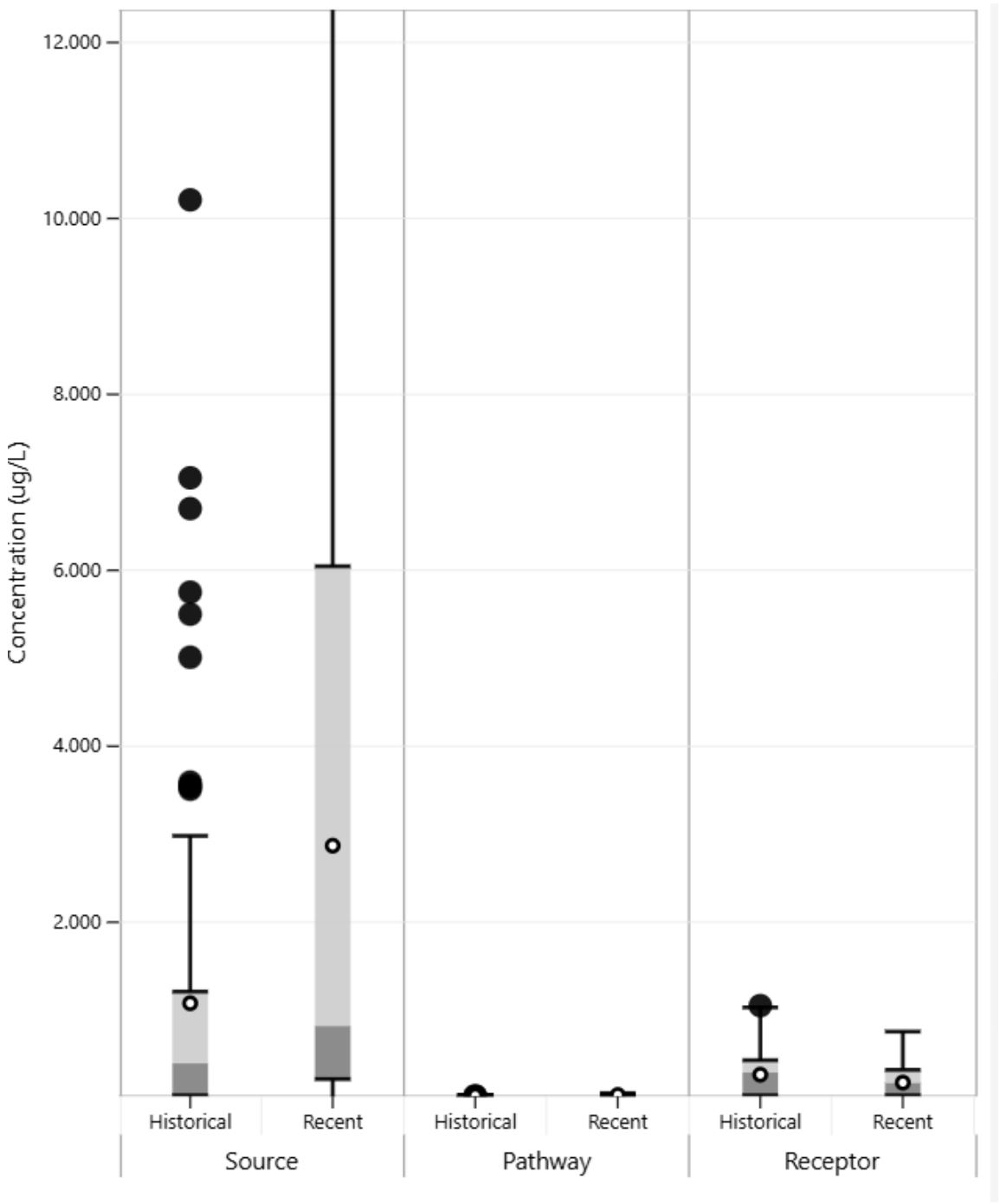

Diagram G9 Box and Whisker Plot – Groundwater – PFBS – Upper Currambene Creek and Yerriyong Gully

Surface water

Interpretive tables

Table G5 Calculated "R squared" for PFOA – Surface water

Location	# of samples	R^2	Max	Min	Median	St Dev	Comment
SW001	20	0.00	0.01	0.01	0.01	0.00	No real trend, <LOR
SW002	21	0.11	0.04	0.01	0.01	0.01	
SW004B	17	0.00	0.04	0.01	0.01	0.01	
SW005	22	0.00	0.47	0.01	0.11	0.09	
SW006	22	0.05	0.43	0.04	0.11	0.09	
SW007	19	0.10	0.12	0.01	0.02	0.03	
SW008	22	0.05	0.11	0.02	0.04	0.03	
SW009	23	0.11	0.52	0.03	0.11	0.15	
SW012	20	0.02	0.17	0.01	0.06	0.05	
SW013	23	0.05	0.08	0.01	0.06	0.02	
SW014	22	0.14	0.08	0.01	0.01	0.02	
SW018	19	0.05	0.52	0.02	0.11	0.16	
SW020	19	0.02	0.11	0.01	0.03	0.02	
SW049	4	0.13	0.08	0.02	0.02	0.03	
SW065	7	0.42	0.10	0.02	0.03	0.03	No real trend, one sample
SW106	2	1.00	0.24	0.24	0.24	0.00	No real trend, two samples
SW123	2	1.00	0.01	0.01	0.01	0.00	No real trend, two samples
SW124	2	1.00	0.43	0.09	0.26	0.24	No real trend, two samples
SW185	2	1.00	0.08	0.03	0.06	0.04	No real trend, two samples
SW187	1	0.00	0.01	0.01	0.01	-	No real trend, one sample
SW188	1	0.00	0.01	0.01	0.01	-	No real trend, one sample

Red = $R^2 \geq 0.70$

Table G6 Calculated "R squared" for PFOS – Surface water

Location	# of samples	R^2	Max	Min	Median	St Dev	Comment
SW001	20	0.38	0.18	0.01	0.03	0.04	
SW002	21	0.10	0.10	0.01	0.03	0.02	
SW004B	17	0.02	0.86	0.02	0.31	0.22	
SW005	22	0.01	6.36	0.71	2.61	1.22	
SW006	22	0.04	13.00	1.10	3.94	3.54	
SW007	19	0.24	3.60	0.25	0.73	0.86	
SW008	22	0.10	2.80	0.42	1.09	0.65	
SW009	23	0.13	25.40	1.34	5.00	7.57	
SW012	20	0.01	4.92	0.02	1.02	1.65	
SW013	23	0.00	2.70	0.01	1.22	0.66	
SW014	22	0.14	3.10	0.01	0.01	0.67	
SW018	19	0.01	8.60	0.52	3.27	2.55	
SW020	19	0.00	2.30	0.35	0.99	0.46	
SW049	4	0.63	1.45	0.07	0.71	0.57	
SW065	7	0.46	2.42	0.66	1.50	0.57	No real trend, one sample
SW106	2	1.00	11.40	5.13	8.27	4.43	No real trend, two samples
SW123	2	1.00	0.01	0.01	0.01	0.00	No real trend, two samples
SW124	2	1.00	8.60	2.40	5.50	4.38	No real trend, two samples
SW185	2	1.00	1.16	0.60	0.88	0.40	No real trend, two samples
SW187	1	0.00	0.16	0.16	0.16	-	No real trend, one sample
SW188	1	0.00	0.10	0.10	0.10	-	No real trend, one sample

Red = $R^2 \geq 0.70$

Table G7 Calculated "R squared" for PFOS+PFHxS – Surface water

Location	# of samples	R^2	Max	Min	Median	St Dev	Comment
SW001	20	0.37	0.20	0.01	0.05	0.05	
SW002	21	0.08	0.12	0.01	0.05	0.03	
SW004B	17	0.01	1.45	0.02	0.53	0.42	
SW005	22	0.00	12.90	0.93	4.50	2.32	
SW006	22	0.02	16.90	2.85	6.40	3.95	
SW007	19	0.18	4.70	0.52	1.57	1.12	
SW008	22	0.02	5.30	1.03	2.30	1.12	
SW009	23	0.10	34.40	2.34	7.00	9.76	
SW012	20	0.03	8.06	0.02	2.23	2.78	
SW013	23	0.01	4.40	0.01	3.10	1.06	
SW014	22	0.13	4.90	0.01	0.01	1.16	
SW018	19	0.00	15.40	1.27	5.17	4.65	
SW020	19	0.00	3.64	0.68	2.13	0.86	
SW049	4	0.52	2.95	0.13	1.18	1.17	
SW065	7	0.62	5.08	1.19	2.50	1.29	No real trend, one sample
SW106	2	1.00	15.30	9.53	12.42	4.08	No real trend, two samples
SW123	2	1.00	0.04	0.01	0.03	0.02	No real trend, two samples
SW124	2	1.00	18.60	4.60	11.60	9.90	No real trend, two samples
SW185	2	1.00	2.66	1.05	1.86	1.14	No real trend, two samples
SW187	1	0.00	0.25	0.25	0.25	-	No real trend, one sample
SW188	1	0.00	0.16	0.16	0.16	-	No real trend, one sample

Red = R^2 ≥0.70

Box and whisker plots

Braidwood Road Drain and Lower Calymea Creek – 7 locations, 143 samples

Source	Pathway	Receptor
Braidwood Road Drain		
SW018	SW007 SW020 SW124	SW005SW006
Lower Calymea Creek		
-	-	SW004B

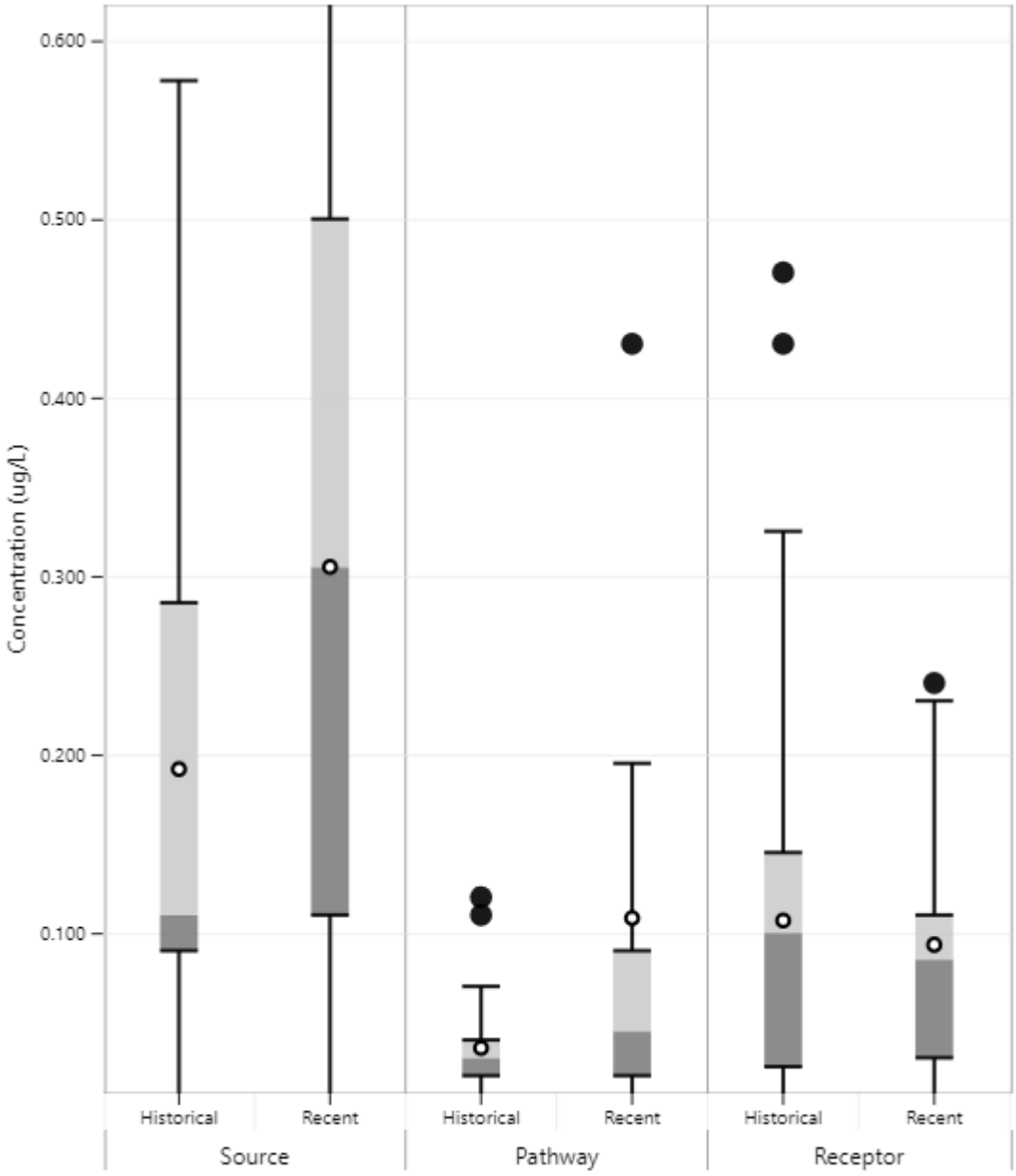

Diagram G10 Box and Whisker Plot – Surface water – PFOA – Braidwood Road Drain and Lower Calymea Creek

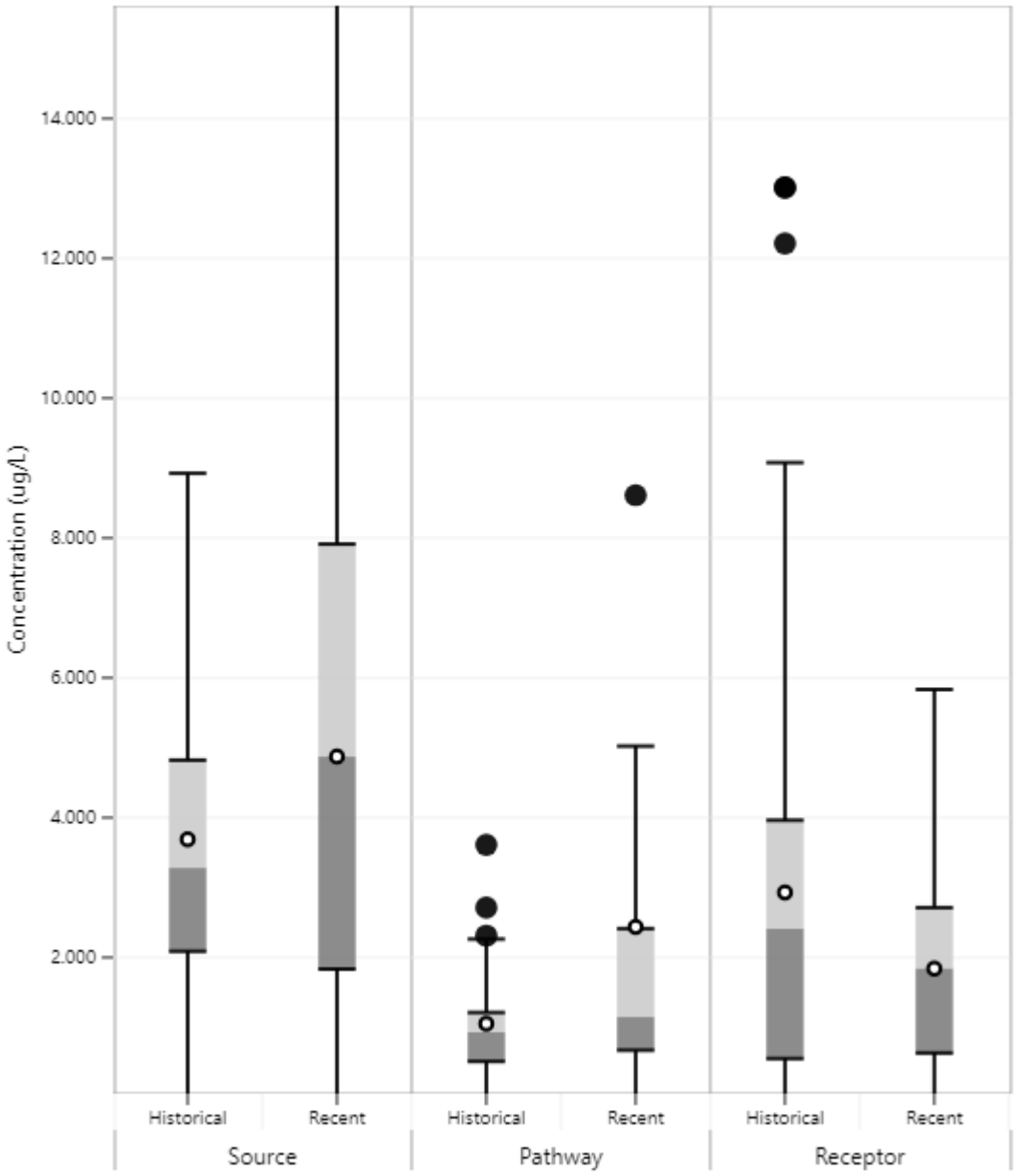

Diagram G11 Box and Whisker Plot – Surface Water – PFOS – Braidwood Road Drain and Lower Calymea Creek

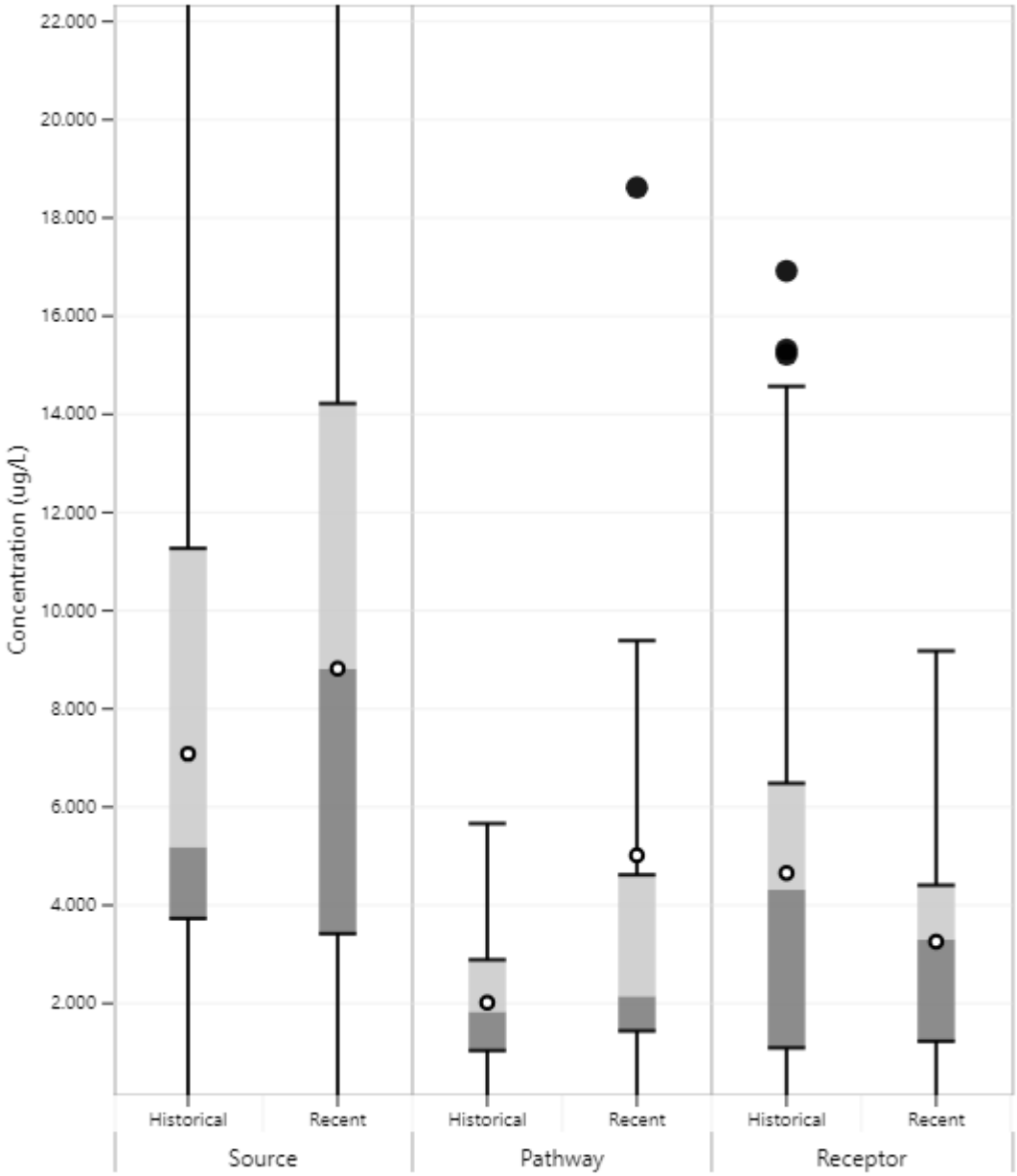

Diagram G12 Box and Whisker Plot – Surface Water – PFOS+PFHxS – Braidwood Road Drain and Lower Calymea Creek

Currambene Creek, Yerriyong Gully, and Parma Creek – 11 locations, 155 samples

Source	Pathway	Receptor
Currambene Creek		
-	SW008 SW049 SW065 SW185 SW188	-
Yerriyong Creek		
SW009 SW106	SW012 SW123	-
Parma Creek		
-	-	SW013 SW014

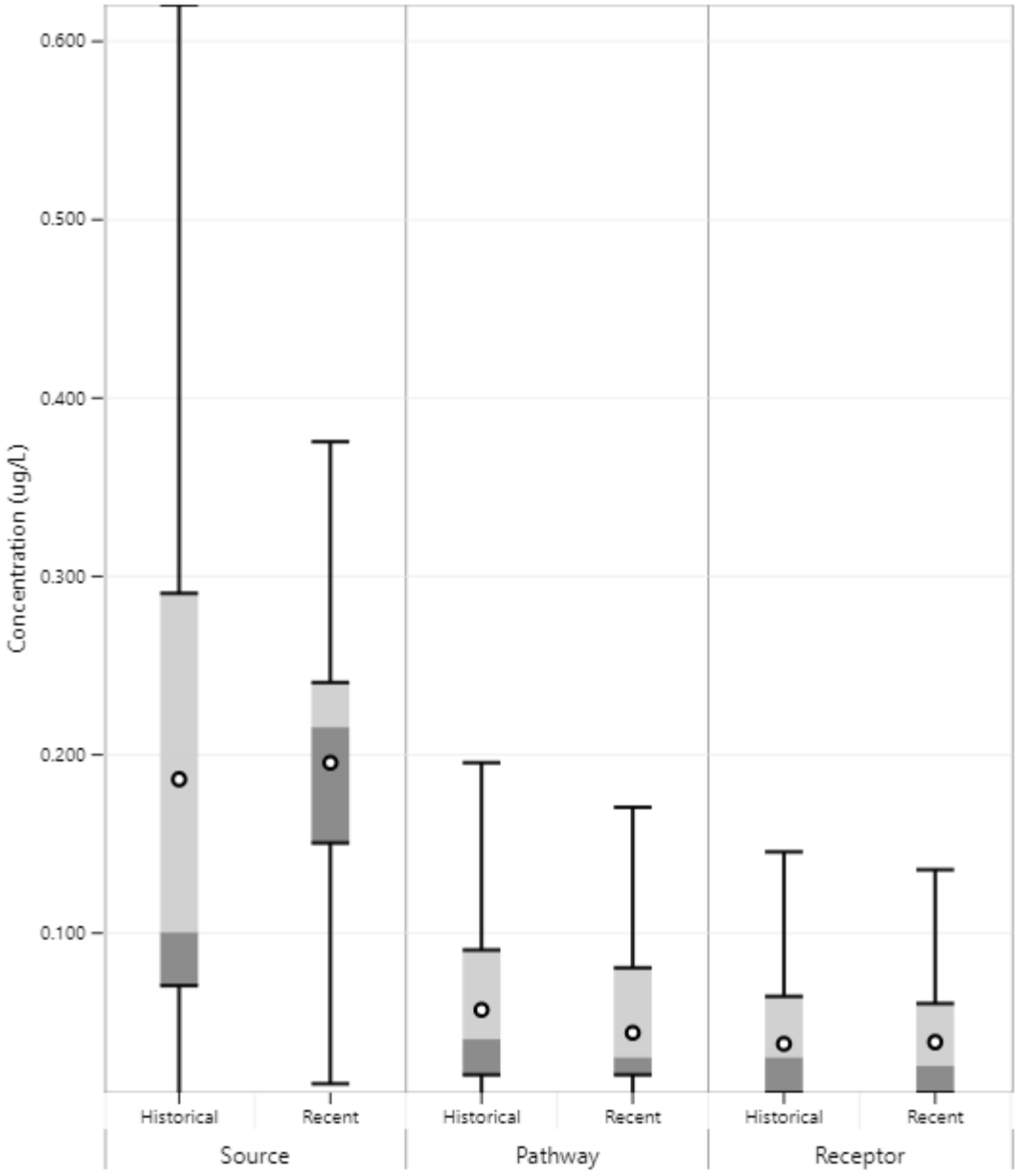

Diagram G13 Box and Whisker Plot – Surface water – PFOA – Currambene Creek, Yerriyong Gully, and Parma Creek

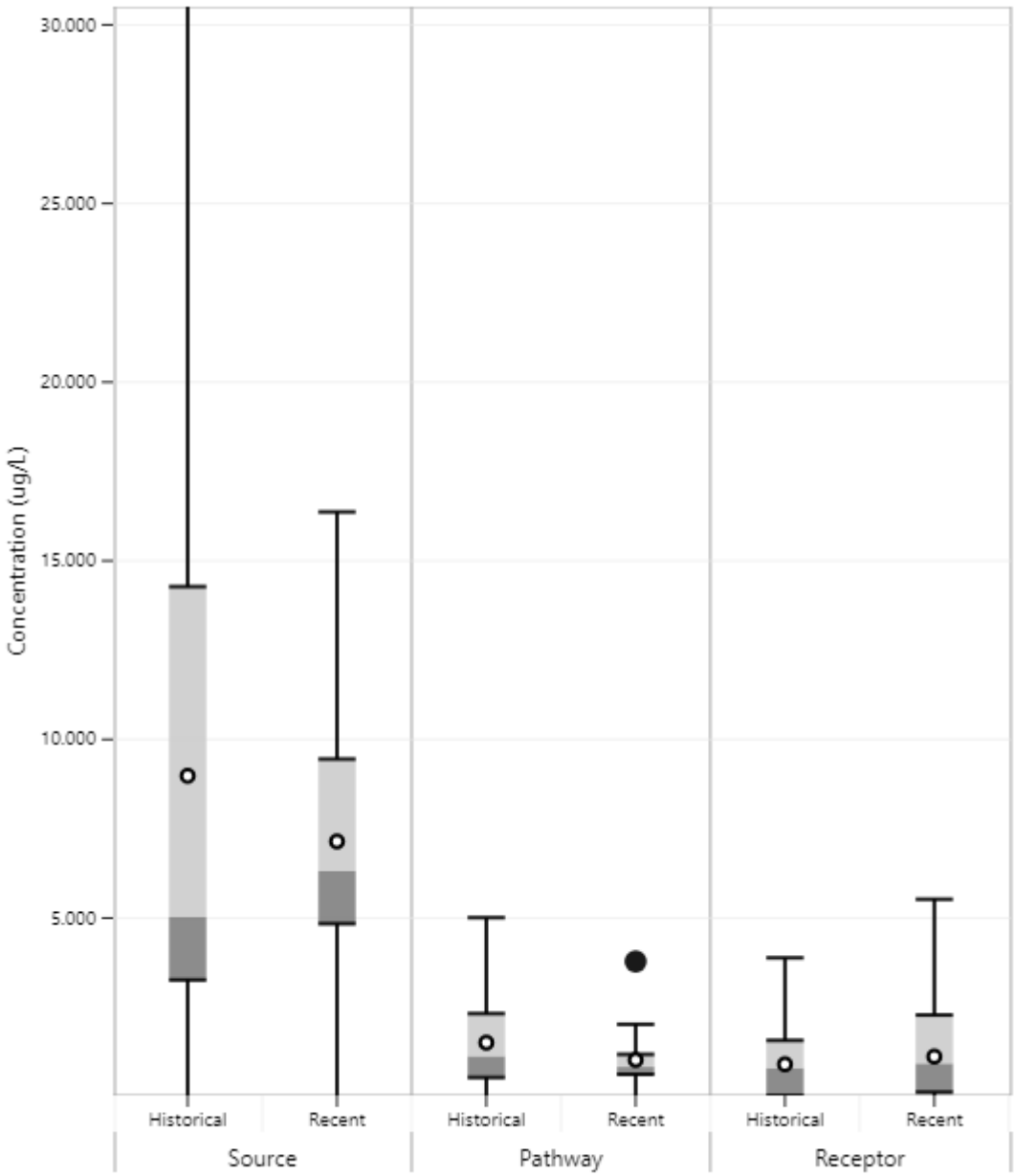

Diagram G14 Box and Whisker Plot – Surface water – PFOS – Currambene Creek, Yerriyong Gully, and Parma Creek

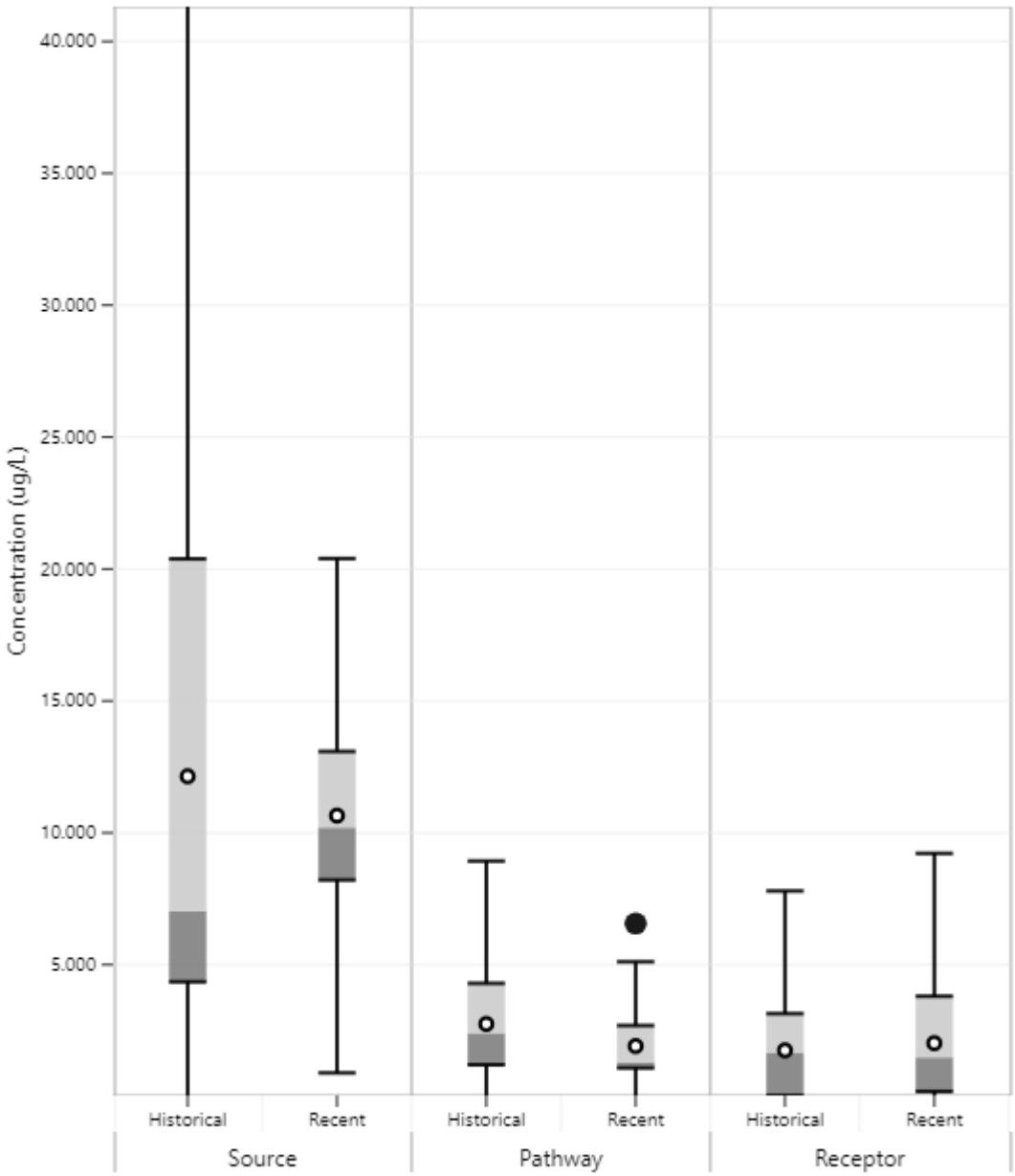

Diagram G15 Box and Whisker Plot – Surface water – PFOS+PFHxS – Currambene Creek, Yerriyong Gully, and Parma Creek

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