



Sampling Event Report – October 2025

**HMAS Creswell and Jervis Bay Range
Facility**

Department of Defence

05 March 2026

→ **The Power of Commitment**



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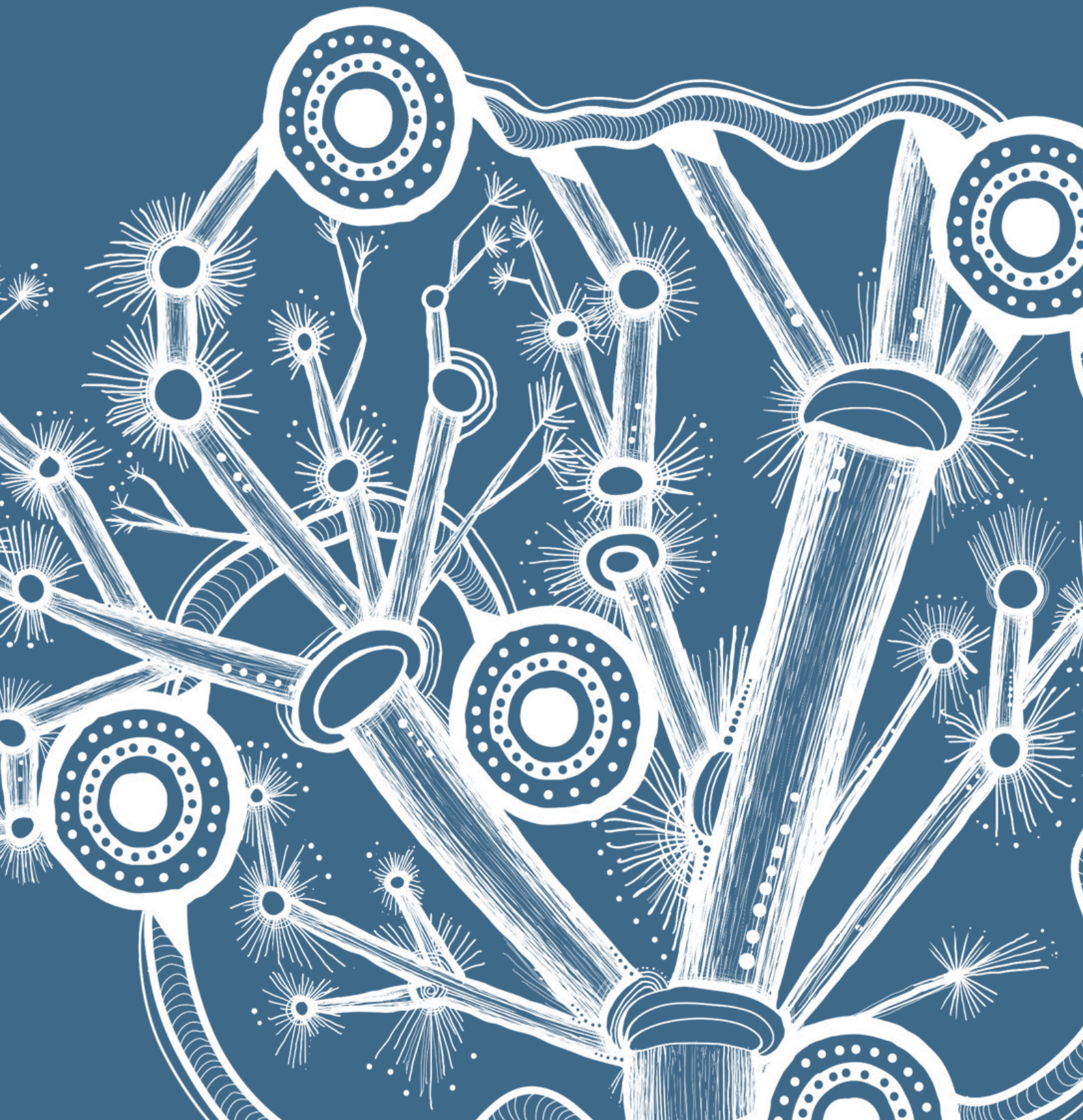
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Acknowledgement of Country

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.



List of acronyms

Acronym	Term
DCMM	Defence Contamination Management Manual
Defence	Department of Defence
DO	Dissolved Oxygen
DQI	Data Quality Indicator
DQO	Data Quality Objective
EC	Electrical Conductivity
EPA	Environment Protection Authority
EQL	Laboratory Estimated Quantitation Limit
HEPA	Heads of Environment Protection Authority
HHRA	Human Health 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
OMR	Ongoing Monitoring Interpretive Report
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
PMAP	PFAS Management Area Plan
QA/QC	Quality Assurance and Quality Control
STP	Sewage Treatment Plant
SWL	Standing Water Level

List of units

Units	Term
°C	Degrees Celsius
µg/L	Micrograms per Litre
µS/cm	MicroSiemens per Centimetre
g	Grams
km	Kilometre
L	Litre
m	Metre
mAHD	Metres Australian Heigh Datum
mg/L	Milligrams per Litre
mV	MilliVolts

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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 Jervis Bay Range Facility (JBRF) (site 0021) and His Majesty's Australian Ship (HMAS) Creswell (site 0020) (hereafter referred to as the 'site') in New South Wales (NSW).

The OMP (Defence, 2025a) outlines the sampling requirements for the site and off-site areas within the Management Area. The location of the site and Management Area is shown in Figure 1, Appendix A, and the site layout is presented in Figure 2, Appendix A.

An Ongoing Monitoring Report (OMR) will be prepared following the completion of each 12-month sampling period.

This sampling event report has been prepared to report the results of the October 2025 event, specifically highlighting first-time detections and/or new exceedances of human health or ecological screening criteria for the sum of Perfluorooctane sulfonic acid (PFOS) and Perfluorohexane sulfonic acid (PFHxS) (herein referred to as PFOS+PFHxS), PFOS and/or Perfluorooctanoic acid (PFOA).

This report has been prepared in accordance with the Defence *Ongoing Monitoring Program Reporting Guidance* issued in February 2024 (Defence, 2024).

1.1 Purpose of this report

The objective of this phase of work was to implement the scope of work for the October 2025 sampling event in accordance with the sampling and analysis quality plan (SAQP) (GHD, 2025a).

The key objectives of the OMP sampling events are:

- 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, groundwater and sediment 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.

The data will assist in the timely identification of risks and inform Defence's approach to the management of PFAS, including updates and revisions to the PFAS Management Area Plan (PMAP) (Defence, 2025b).

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.

The opinions, conclusions and any recommendations in this report are based on information obtained from, and testing undertaken at or in connection with, specific sample points. Site conditions at other parts of the site may be different from the site conditions found at the specific sample points.

Investigations undertaken in respect of this report are constrained by the particular site conditions, such as the location of buildings, services and vegetation. As a result, not all relevant site features and conditions may have been identified in this report.

GHD has prepared this report on the basis of information provided by Department of Defence and others who provided information to GHD (including Government authorities), 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 accordance with the SAQP (GHD, 2025a), as follows. (Deviations of the scope of works are presented in Section 2.1):

- Organise fieldwork and obtain approval for site access to monitoring locations as presented in Figure 3, Appendix A.
- Collection of groundwater samples and water quality parameters at the scheduled groundwater locations (refer to Table 1 and Figure 4 in Appendix A for specific locations).
- Collection of surface water samples and water quality parameters at the scheduled surface water locations (refer to Table 2 and Figure 5 in Appendix A for specific locations).
- Collection of sediment samples at scheduled locations (refer to Table 3 below and Figure 6 in Appendix A for specific locations).
- Collection of tank samples at scheduled locations (refer to Table 4 below and Figure 7 in Appendix A for specific locations).
- Analyse samples for quality assurance and quality control (QA/QC).
- Analysis of samples for PFAS suite at the low level limit of reporting (LOR) for locations where there is a potential drinking water exposure and standard LOR for all other locations (refer Table 2).
- Data management of the OMP field and laboratory data in Defence ESdat database.
- Preparation of this sampling event report.

Table 1 *Proposed groundwater sampling locations*

Catchment	SPR	Area	Base id	Locations	Number of Locations	Total
Captains Lagoon	Source	On-Site	0020	MW052	1	26
			0021	MW028, MW030, MW062, MW102, MW109, MW119, MW120, MW121, MW123, MW127	10	
	Pathway	On-Site	0020	MW012A, MW055, MW056, MW057, MW058, MW059, MW070, MW071	8	
			0021	MW108, MW124, MW134	3	
		Off-Site	0020	MW104, MW102D, MW102S	3	
			0021	MW018	1	
Clay Pools	Receptor	On-Site	0021	MW020	1	1
Flatrock Creek	Source	On-Site	0020	MW037, MW112	2	18
			0021	MW026, MW117, MW118	3	
	Pathway	On-Site	0020	MW001, MW007, MW017, MW068, MW069, MW109, MW110	7	
			0021	MW125, MW126, MW128, MW160, MW163, MW164	6	
Lakes	Pathway	Off-Site	0021	MW129, MW130, MW135, MW136, MW137, MW138, MW139, MW140	8	8
Mary Creek	Source	On-Site	0021	MW061, MW063, MW064, MW065, MW101, MW103, MW105, MW106, MW107, MW110, MW111, MW150, MW153	13	21
	Pathway	On-Site	0021	MW021, MW060, MW070, MW071, MW072, MW112, MW113 ¹ , MW133	8	
	Pathway	On-Site	0021	MW022	1	3

Catchment	SPR	Area	Base id	Locations	Number of Locations	Total
Summer cloud Creek		Off-Site	0021	MW131, MW132	2	
Total						77

¹ Not sampled in October 2025 event, refer to Section 2.1.

Table 2 *Proposed surface water sampling locations*

Catchment	SPR	Area	Site	Locations	Number of Locations	Total
Bherwerre Barrier	Receptor	Off-Site	0021	SW212	1	1
Captains Lagoon	Source	On-Site	0021	SW001 ¹ , SW027	2	11
	Pathway	On-Site	0020	SW057	1	
			0021	SW013 ¹ , SW019 ¹ , SW021 ¹	3	
		Off-Site	0020	SW011	1	
	Receptor	On-Site	0020	SW004, SW005	2	
		Off-Site	0020	SW010, SW012	2	
Clay Pools	Receptor	Off-Site	0021	SW076, SW077, SW078, SW079, SW080	5	5
Flatrock Creek	Source	On-Site	0020	SW016	1	11
	Pathway	On-Site	0020	SW023, SW054	2	
			0021	SW020 ¹ , SW022, SW025 ¹	3	
		Off-Site	0020	SW030	1	
	Receptor	Off-Site	0020	SW026, SW027 ¹ , SW029, SW033	4	
Lakes	Receptor	Off-Site	0021	SW032 ² , SW034 ² , SW037 ² , SW040 ²	4	4
Mary Creek	Source	On-Site	0021	SW002, SW003 ¹ , SW004 ¹ , SW011 ¹ , SW017 ¹ , SW110 ¹ , SW127 ¹ , SW153	8	16
	Pathway	On-Site	0021	SW010 ¹ , SW048	2	
		Off-Site	0021	SW044, SW045, SW053	3	
	Receptor	Off-Site	0021	SW043, SW052, SW211	3	
HMAS Creswell STP	Tank	On-Site	0020	SW037	1	1
Summercloud Creek	Pathway	Off-Site	0021	SW057, SW058	2	4
	Receptor	Off-Site	0021	SW056, SW188	2	
Telegraph Creek	Receptor	Off-Site	0021	SW068	1	1
Total						54

¹ Not sampled in October 2025 event, refer to Section 2.1.

² Analysis of samples for PFAS suite at the low level LOR (0.002-0.01 µg/L).

Table 3 *Proposed sediment sampling locations*

Catchment	SPR	Area	Site	Location	Number of Locations	Total
Captains Lagoon	Pathway	On-Site	0021	SD009, SD011	2	4
	Receptor	On-Site	0020	SD019	1	
		Off-Site	0020	SD024	1	
Clay Pools	Receptor	Off-Site	0021	SD066, SD067, SD068, SD069	4	4
Flatrock Creek	Pathway	On-Site	0021	SD018, SD021	2	4
	Receptor	Off-Site	0020	SD002, SD004	2	
Mary Creek	Pathway	On-Site	0021	SD006 ¹ , SD040	2	6
		Off-Site	0021	SD036, SD037	2	
	Receptor	Off-Site	0021	SD035, SD044	2	
Summercloud Creek	Receptor	Off-Site	0021	SD046, SD188	2	2
Total						20

¹ Not sampled in October 2025 event, refer to Section 2.1.

Table 4 *Proposed RAN SSSS Tank sampling locations*

Area	SPR	Area	Site	Locations	Number of Locations	Total
RAN SSSS	Tank	On-site	0021	OTH001, OTH002, OTH006	3	3
Total						3

2.1 SAQP deviations

The October 2025 sampling event was completed in general accordance with:

- The SAQP (GHD, 2025a).
- GHD's health and safety protocols.
- GHD's standard operating procedures for the field work, which have been developed in accordance with NSW contaminated land guidance.

Deviations from the SAQP are outlined in Table 5 below.

Table 5 *SAQP (GHD, 2025a) deviations*

SAQP Deviation	Comment/Justification	Impact on dataset
Samples, as well as associated gauging and water quality parameters were not collected from 1 of the 77 scheduled groundwater sampling locations	0021_MW113 was unable to be sampled as the well was observed to be damaged from ongoing remediation works.	The lack of sampling data for 0021_MW113 represents a data gap for both the OMP and validation of the Mary Creek remediation works. It is noted that samples were collected from surrounding wells 0021_MW110, 0021_MW112 and 0021_MW071 and that samples collected at 0021_MW113 historically are below the adopted assessment criteria. While, the absence of a sample still presents a data gap in the characterisation of source-pathway-receptor linkages, it is anticipated impact of the data gap is anticipated to be low.

SAQP Deviation	Comment/Justification	Impact on dataset
Samples as well as associated water quality parameters were not collected from 15 of the 54 scheduled surface water sampling locations	Samples and associated water quality parameters were unable to be collected from the following 13 locations as they were observed to be dry: 0020_SW023, 0021_SW001, 0021_SW003, 0021_SW004, 0021_SW011, 0021_SW013, 0021_SW017, 0021_SW019, 0021_SW020, 0021_SW021, 0021_SW025, 0021_SW027, 0021_SW127.	The lack of sampling data for these surface water locations is not considered to be significant, as it confirms that the source-pathway-receptor linkages for PFAS in surface water at this location are incomplete at the time of sampling. A sediment sample was collected at 0021_SW013 (0021_SD009) and 0021_SW025 (0021_SD021).
	Samples and associated water quality parameters were unable to be collected from 0021_SW110. This sample was formerly collected in a swale directly downstream of stormwater infrastructure. As part of AEC A remediation work the surface topography of this area has been reworked, and surface water no longer flows through this sample point (refer Photos 1 and 2).  Photo 1 SW110 in October 2025  Photo 2 SW110 in April 2025	The lack of sampling data for these surface water locations is not considered to be significant as it confirms that the source-pathway-receptor linkages for PFAS in surface water at this location is incomplete at the time of sampling.
	A sample and associated water quality parameters were originally collected at 0021_SW010 as part of the OMP and validation sampling program. However, upon review as part of the validation program, the specific point where this sample was collected was considered to be unrepresentative of 0021_SW010, and the sample renamed (0021_SW223). This new sample has been removed from this report as it was representative of the remedial works not the OMP.	The lack of sampling data for 0021_SW010 represents a data gap for the OMP. However, it is noted that samples are collected more frequently at this location as part of the validation program. In addition, OMP location 0021_SW053 provides information on downgradient concentrations.
Samples as well as associated water quality parameters were not collected from 1 of the 20 scheduled sediment sampling locations	A sample was originally collected at 0021_SD006 as part of the OMP and validation sampling program. However, upon review as part of the validation program, the specific point where this sample was collected was considered to be unrepresentative of 0021_SD006, and the sample renamed (0021_SD216). This new sample has been removed from the report as it was representative of the remedial works not the OMP.	The lack of sampling data for 0021_SD006 represents a data gap for the OMP. However, it is noted that samples are collected more frequently at this location as part of the validation program. In addition, OMP location 0021_SD036 provides information on downgradient concentrations.

3. Methodology

3.1 Sampling methodology

The methodology used for the October 2025 sampling event was completed in accordance with the SAQP (GHD, 2025a), with the exception of any deviations outlined in Section 2.1. Sampling methodology is summarised in Table 6 below.

Table 6 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). – AS/NZS 5667.11:1998 Water Quality – Sampling, Part 11: Guidance on the Sampling of Groundwaters (Standards Australia, 1998c). – AS/NZS 5667.12:1999 Water Quality – Sampling, Part 12: Guidance on sampling of bottom sediments (Standards Australia, 1999). – National Environmental Protection (Assessment of Site Contamination) Measure (ASC NEPM) (NEPC, 2013). – PFAS National Environmental Protection Measure (NEMP) 3.0 (HEPA, 2025).
Sampling methodology	Groundwater The monitoring wells were gauged prior to the collection of groundwater samples using a decontaminated oil/water interface probe to measure the standing water level (SWL). In addition, the base depth of the monitoring wells was measured. Depth measurements were referenced to the top of the well casing as an established datum. Where possible, depth measurements were recorded to the nearest millimetre. Well depth measurements are presented in Table B1, Appendix B, and in the field notes in Appendix D. Calibration certificates for the interface probe are provided in Appendix E. The wells were purged and sampled using dedicated and disposable high-density polyethylene (HDPE) tubing coupled to a low-flow peristaltic pump or micropurge system. Using this approach, only dedicated disposal equipment came into contact with the sample, reducing the potential for cross-contamination between sampling locations. Where wells were drawing down, or only a small volume of water was available, a sample was collected prior to running the well dry. A description of each sampling location and the sample material was recorded on the field notes that are provided in Appendix D. Surface water Surface water samples were collected as a ‘grab sample’ mid-way through the water column or approximately 0.5 m below the surface at the individual surface water sampling locations. If the reachable water column was less than 0.5 m deep, the sample was collected from at least half the water depth, with care taken to avoid surface films and sediments entering the sample. A description of each sampling location and the sample material was recorded on the field notes that are provided in Appendix D. Sediment Sediment samples are to be representative of potentially deposited sediments. Samples were collected from a depth from within the water body using a hand trowel or nitrile-gloved hand to a maximum depth of 0.3 m below the sediment surface. Where this was not possible (due to embankment instability and/or high surface water depths), samples were collected using a hand auger. A description of each sampling location and the sample material was recorded on the field notes that are provided in Appendix D. Infrastructure tanks Tank grab samples were collected using the sampling methodology provided below for each location:

Item	Details
	– OTH001 (Training Water Holding Tank [S415]): Sampling containers filled directly from the tap. – OTH002 (Fire Main Water Tank [S416]): Sampling containers filled from the opening at the top of the tank with a sampling pole, accessed via a ladder. – OTH006 (DLSTRU [S481]): Samples containers will from the valve tap inside the dosing room (building S482). A description of each sampling location and the sample material was recorded on the field notes that are provided in Appendix D.
Field parameters	Field parameters (pH, electrical conductivity (EC), redox, dissolved oxygen (DO) and temperature) were measured and recorded for all groundwater, surface water, and infrastructure tank 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 calibrated water quality meters (WQM). The calibration certificates and field calibration records are provided in Appendix E. In addition, observations of water quality such as the flow (flowing or not flowing) (for surface water only), colour, turbidity level, and the presence/absence of odour or sheen were recorded. A description of each sampling location and the sample material was recorded on the field notes that are provided in Appendix D.
Sample handling	New laboratory supplied containers were used at each location for collection of samples and the sample containers were labelled with the job number, sample identification and date collected.
Decontamination	Where re-usable sampling equipment was used (i.e. trowel or hand auger for sediment sampling, and interface probe for groundwater sampling) then prior to and following the collection of each sample the equipment underwent decontamination including: – Washing of equipment with phosphate/PFAS-free detergent (Liquinox) and/or, – Rinsing of equipment with laboratory supplied PFAS-free water.
QA/QC Samples	The Quality Assurance and Quality Control (QA/QC) program as per the SAQP (GHD, 2025a). The program for this round of sampling included: – 20 x intra-laboratory duplicates which met the target frequency. – 20 x inter-laboratory duplicates which met the target frequency. – 16 x rinsate samples which met the target frequency. – 3 x trip blanks, which met the target frequency. The data validation assessment is presented in Appendix C.

3.2 Adopted screening criteria

The following guidance documents have been used to assess the data.

- Heads of Environmental Protection Authorities (HEPA) (2025). *PFAS National Environmental Management Plan (NEMP), Version 3.0*. (HEPA, 2025).
- National Health and Medical Research Council (NHMRC) (2025). *Australian Drinking Water Guidelines 2011, Version 4.0 updated June 2025*. (NHMRC, 2011).

Quantitative triggers from the Human Health Risk Assessment (HHRA) (GHD, 2019a) have been adopted as performance measures in the absence of screening criteria to enable assessment of potential risk associated with site specific exposure pathways. These criteria cover defence personnel in training exercises at RAN SSSS, sediments and clays within Summercloud Creek and Clay Pools, and the potential risks associated with consumption of biota.

- The following criteria extracted from the HHRA (GHD, 2019a) have been used to assess the data:
 - Exposure point concentrations (EPC) for RAN SSSS site specific criteria.
 - Activity specific HHRA EPC for clay pools site specific criteria.
 - Human health consumption of biota site specific criteria.
 - Human health ceremonial site specific criteria for sediments and clays.

The adopted screening criteria to assess the PFAS data in this monitoring program includes both human health and ecological screening criteria, as per the OMP (Defence, 2025b) and SAQP (GHD, 2025a). Screening criteria are applied on a catchment basis and are presented in Table 7 below.

Results were also compared to the following qualitative triggers for further consideration:

- First time detection of PFAS in surface water location.
- First time exceedance of the applicable screening criteria at that location.
- Check to see if there were any land use changes.

Table 7 Summary of adopted screening criteria – surface water, groundwater, and sediment

Media	Receptor	Criteria	Analyte						Applied to catchment?								
			PFAS (sum of total)	PFOS + PFHxS	PFHxS	PFOS	PFOA	PFBS	Mary Creek	Flatrock Creek	Captains Lagoon	Telegraph Creek	The Lakes	Clay Pools	Summercloud Creek	Bherwerre Barrier	RAN SSSS Infrastructure tanks
Groundwater and surface water	Ecology	NEMP (HEPA, 2025) – freshwater and marine water 95% species protection	-	-	-	0.13 ug/L	220 ug/L	-	C	C	C	✓	✓	✓	✓	✓	-
	Human health – direct contact and incidental ingestion	<i>Applicable to surface water only</i>	-	-	0.03 ug/L	0.008 ug/L	0.2 ug/L	1 ug/L	-	-	-	-	✓	-	-	-	-
		NEMP (HEPA, 2025) – Recreational	-	2 ug/L	2 ug/L	2 ug/L	10 ug/L	-	C	✓	✓	✓	✓	✓	✓	-	-
	Human health – consumption of biota	Detection >0.01 ug/L (GHD, 2019a)	-	>0.01 ug/L	-	-	-	-	-	-	-	✓	✓	✓	-	✓	-
	Human health – Defence personnel	Activity specific HHRA EPC for RAN SSSS (GHD, 2019a)	39.7 ug/L	37 ug/L	-	-	-	-	-	-	-	-	-	-	-	-	✓
Sediment	Human health – ceremonial	Detection >0.0002 mg/kg (GHD, 2019a)	>0.0002 mg/kg	-	-	-	-	-	-	-	-	-	-	-	✓	-	-
		HHRA Exposure point concentration for clay pools (GHD, 2019a)	0.0014 mg/kg	-	-	-	-	-	-	-	-	-	-	✓	-	-	-

Table Notes:

✓ = performance measure to be applied for risk screening purposes,

C = performance measure to be used for qualitative, contextual purposes only,

- = performance measure not applicable

3.3 Quality assurance and quality control

The data quality objectives (DQOs) and data quality indicators (DQIs) adopted for these works are presented in the SAQP (GHD, 2025a). Quality assurance (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). Quality control (QC) involves protocols to monitor and measure the effectiveness of QA procedures.

The relative percentage difference (RPD) for the laboratory results was calculated for each duplicate pair, as presented in Table C4a and Table C4b of Appendix C. RPDs were calculated where the concentration in an individual sample was $>1 \times \text{LOR}$ (also known as the EQL). The majority of RPDs were within acceptable limits, with exceptions noted in Appendix C.

Trip blank analytical results are provided in Table C5 of Appendix C. All analytes tested for the trip blanks were less than the LOR.

Rinsate sample analytical results are provided in Table C6 of Appendix C. All analytes tested for the rinsate samples were less than the LOR.

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.

QA/QC assessment concluded that the collected data is considered appropriate for the work undertaken and are considered usable 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, 2018).

4. Field observations and results

4.1 General observations

The weather conditions and general observations (including activities that may impact the monitoring program) recorded during the October 2025 sampling event completed over four days from 20 to 23 October 2025 are summarised in Table 8 below.

Table 8 General observations

Items	Observations
Weather Conditions	During the sampling event from 20 to 23 October 2025 the weather was observed to be generally sunny or overcast during the day, with some rainfall overnight between 21 and 22 October. Jervis Bay Airfield (Jervis Bay Airfield AWS Station ID 68264) (Bureau of Meterology, 2025) recorded the maximum daily temperature range to be between 19.1 °C and 31.4 °C. Cumulative rainfall was recorded to be 0 mm in the 48 hours prior to 9am on the start of the fieldwork program on the 20 October 2025. 3.4 mm of rain was recorded during the fieldwork program, falling in the 24 hours prior to 8am on 22 October. No rainfall was recorded on other days. An assessment of rainfall data for October 2025 event compared to the last three October events (2022, 2023 and 2024) indicates the following: – 2022: 88.6 mm of rainfall was recorded in the 48 hours prior to 9 am on the first day of sampling, with 5.2 mm recorded during the sampling event (Bureau of Meterology, 2025; AECOM, 2023). – 2023: No rainfall was recorded in the 48 hours prior to 9 am on the first day of sampling, with 7.4 mm of rainfall was recorded during the sampling event (Bureau of Meterology, 2025; AECOM, 2024). – 2024: 1.4 mm of rainfall was recorded in the 48 hours prior to sampling, with another 1.4 mm recorded during the sampling event (Bureau of Meterology, 2025; GHD, 2025b). The 2025 sampling event was very similar to the 2024 and 2023 events in terms of weather and rainfall preceding and during sampling, this is reflected in similar surface water collection rates between these events (2025: 74%; 2024: 69%; 2023: 72%) (AECOM, 2024; GHD, 2025b). Flow observations were found to be somewhat lower than the previous monitoring event in April 2025.
Estate Management Works, Training Activities and/or Construction Works.	Ongoing construction works were observed during the sampling event including earthworks for: – Mary Creek PFAS Remediation works at JBRF and RAN SSSS, including: • Water treatment plant construction, storage of equipment and plant, earthworks, trenching, stockpiling, vegetation clearance, plant operation. • Landscaping the surface of the rising main installation and clean water swale along MC07 drain. • Excavation, installation of drainage infrastructure, and re-lining of drainage channels for the MC05 drain was observed within AEC B. • Excavation and trenching at the southern end of the north-south runway. • Excavations and earthworks were primarily being undertaken in Excavation 3. • Landscaping and other minor drainage works within AEC A including around the site compound at 0021_SW001, and within AEC B along the ring road near 0021_SW154 and 0021_SW128. • The following sampling locations located within the surface water drainage channels within and surrounding AEC A and AEC B were observed to be undergoing, or recently undergone and completed, excavation and installation of new drainage infrastructure, including culverts and rip-rap: 0021_SW001, 0021_SW127, 0021_SW011, and 0021_SW153. – Temporary water treatment plant in operation at Mary Creek, located upgradient of monitoring well locations 0021_MW060, 0021_MW70, 0021_MW072 and 0021_MW072.

Items	Observations
	– Mid-term refresh works at HMAS Creswell within Flatrock Creek / Captains Lagoon catchments, including stockpiling, foreshore construction works, and building upgrades/restorations. – Off-site construction works were observed along Jervis Bay Road and Wreck Bay Road as part of a new water pipeline for Jervis Bay Territory.

4.2 Field observations and measurements

The observations and measurements recorded during the field activities for the October 2025 annual sampling event are summarised in Table 9 below.

Table 9 Summary of field observations and measurements

Item	Description
Access and Sample Collection	Most sampling locations were accessible and able to be sampled, with the exception of the following: – 0021_MW113 was unable to be sampled as the well was observed to be damaged from ongoing remediation works. – 0021_MW055 required use of a metal detector to locate the well as it was covered in 50 mm of mulch.
Monitoring Well Network Condition	Most monitoring wells were in a fair condition, with the exception of the following: – 0020_MW001: Replaced well cap. Well was noted to not seal properly as the threaded joints are exposed on the inside of the casing. – 0021_MW026: Replaced well cap, old cap was old and difficult to remove. – 0021_MW028: Monument appeared to be driven into, PVC top section snapped off at joint, top section PVC and monument are not secure. – 0021_MW110: Monument was observed to be damaged. GHD understands EPS struck the monitoring well during remedial works. The lid was pushed and wouldn't close. The well itself is not damaged and can be sampled. – 0021_MW113: Monument observed to be damaged. GHD understands EPS damaged this well during remedial works. PVC top section and monument on an angle. Unable to dip past 0.92 metres below top of casing (mbTOC) and unable to sample. – 0021_MW150: Gatic is rusted and does not seal properly allowing water in.
Water Observations	Groundwater The following groundwater observations were made: – Water colour ranged from clear to coloured (yellow, orange, and brown). Some locations had turbid water; turbidity estimates ranged from low to high turbidity. Some locations had sediment accumulation despite well purging. – Locations 0020_MW012A, 0020_MW017, 0020_MW055, 0020_MW070, 0020_MW109, 0021_MW020, 0021_MW026, 0021_MW061, 0021_MW070, 0021_MW071, 0021_MW106, 0021_MW109, 0021_MW124, 0021_MW128, 0021_MW136, 0021_MW137, and 0021_MW164 recorded varying degrees of hydrogen sulphide or rotten egg-like odours. – An organic/decaying organics odour was noted at the following groundwater locations: 0020_MW102S, 0021_MW060, 0021_MW064, 0021_MW065, 0021_MW110, 0021_MW131, and 0021_MW138. – A hydrocarbon odour was noted at location 0021_MW062 and 0021_MW102 (both located within RAN SSSS). Field notes are attached in Appendix D. Surface Water The following surface water observations were made: – Water colour ranged from clear to coloured (yellow, yellow-orange, and brown), and mostly low turbidity for all surface water locations where water was flowing. Locations where water was not flowing were usually noted as having higher turbidity.

Item	Description
	- Locations 0020_SW011, 0020_SW057, 0021_SW044, and 0021_SW057, were noted to have film or flocculation on the surface of the water or on the side banks of the water body. It is likely that the foam is naturally occurring. - A brittle/organic sheen was noted at surface water locations 0021_SW002, and 0021_SW022. - An organic/decaying organics odour was noted at surface water locations 0021_SW032, 0021_SW034, and 0021_SW044. - All locations were observed to be flowing or tidally influenced, except for the following: - Lakes, swamps, lagoons, and treatment ponds and treatment plants: 0020_SW004, 0020_SW005, 0020_SW016, 0020_SW037, 0021_SW032, 0021_SW034, 0021_SW037, 0021_SW040, - Clay pools: 0021_SW076, 0021_SW077, 0021_SW078, 0021_SW079 and 0021_SW080. - Stagnant or ponded streams: 0020_SW054, 0021_SW002, 0021_SW022, 0021_SW043, 0021_SW044, 0021_SW045, 0021_SW048, 0021_SW056, and 0021_SW153. - Other environmental observations including weather, temperature, slope and erosion were recorded on the field sheets, attached in Appendix D. Photographs of the test locations were taken for all surface water/sediment locations. RAN SSSS Infrastructure Tanks - All locations were noted to be clear with no discernible odour or sheen.
Depth to Groundwater and Flow Direction	Depth to groundwater ranged between 0.15 mbTOC (0021_MW150) to 16.361 mbTOC (0021_MW129). Groundwater elevations ranged between 0.548 (0020_MW017) and 74.059 (0021_MW101) metres Australian Height Datum (mAHD). Groundwater gauging data is presented on the field sheets in Appendix D. Inferred groundwater contours and groundwater flow direction for the upper overburden aquifer, based on field data from this sampling event, are shown on Figure 8, Appendix A. The inferred local groundwater flow direction in the upper overburden aquifer was to the north, west and south, which is consistent with findings of the Detailed Site Investigation (GHD, 2019b). Several groundwater monitoring wells were omitted from the contour plan due to the following: 0021_MW129, 0021_MW130, 0021_MW135, 0021_MW136, 0021_MW138, and 0021_MW139, as these wells are installed in the underlying lower aquifer. 0020_MW069, 0020_MW070, and 0020_MW071, as these wells have not been surveyed. Field notes, including sample collection depth and details on the monitoring well construction are attached in Appendix D.
Geochemical Parameters	Groundwater Groundwater geochemical parameters were measured during the collection of water samples. The readings are presented in Table B1, Appendix B, and are summarised below: - Dissolved oxygen ranged from 0.00 mg/L (0020_MW102D, 0021_MW022) to 3.92 mg/L (0020_MW069) indicating poor to well oxygenated conditions. - Electrical conductivity ranged from 86.8 µS/cm (0021_MW111) to 2005 µS/cm (0021_MW030) indicating freshwater conditions. - pH ranged from 3.9 (0020_MW037, 0021_MW163) to 7.28 (0020_MW007) indicating acidic to neutral conditions. - Redox ranged from -356.2 mV (0021_MW065) to 336.9 mV (0020_MW071) indicating reducing to oxidising conditions. When accounting for standard hydrogen electrode conditions range from slightly reducing to oxidising. - Temperatures ranged from 16.0 °C (0021_MW129, 0021_MW131) to 26.0 °C (0021_MW102). However, one of the four water quality meters used was observed during field calibration to have temperature readings around 3 °C higher than the other water quality meters. Locations potentially affected by this are identified in Tables B1 and B2, Appendix B. Field notes are provided in Appendix D and calibration records are provided in Appendix E. Surface Water

Item	Description
	Surface water geochemical parameters were measured during the collection of water samples. The readings are presented in Table B2, Appendix B, and are summarised below: – Dissolved oxygen ranged from 1.01 mg/L (0021_SW076) to 9.73 mg/L (0020_SW030) indicating poor to well oxygenated conditions. – Electrical conductivity ranged from 109.3 µS/cm (0021_SW080) to 54,165 µS/cm (0020_SW012) indicating freshwater to saline (marine) conditions. – pH ranged from 4.39 (0021_SW058) to 9.67 (0021_SW188) indicating slightly acidic to slightly alkaline conditions. Most samples were near neutral pH, with an average and median pH of 6.30 and 5.95, respectively. – Redox ranged from -148.3 mV (0021_SW048) to 283.2 mV (0020_SW030) indicating reducing to oxidising conditions. – Temperatures ranged from 15.0 °C (0021_SW079) to 26.7 °C (0021_SW153). However, one of the four water quality meters used was observed during field calibration to have temperature readings around 3 °C higher than the other water quality meters. Locations potentially affected by this are identified in Tables B1 and B2, Appendix B. Field notes are provided in Appendix D and calibration records are provided in Appendix E.
Sediment Observations	Sediment sampled and logged during this monitoring event comprised of sand, gravel, silt, and clay materials with varying amounts of organic material (roots, leaves, grass and decaying organics). No anthropogenic material, staining, or non-organic odours were noted. Organic odours were noted at six sediment locations (0020_SD024, 0021_SW035, 0021_SD036, 0021_SD066, 0021_SD067, and 0021_SD068). Field notes are attached in Appendix D.

4.3 Summary of analytical results

4.3.1 Current event

The PFAS analytical results from this sampling event are presented in Table B3a to B3j, and Table B4a to B4c, Appendix B. A summary of current events results are provided below.

Summary of groundwater analytical results:

- 76 primary samples were collected as part of the October 2025 sampling event.
- 57 primary samples reported PFOS+PFHxS concentrations above the LOR.
- 31 primary samples reported PFOA concentrations above the LOR.
- 18 samples reported concentrations exceeding the adopted the human health recreational screening criterion for PFOS+PFHxS.
- 36 samples reported concentrations exceeding the adopted ecological criteria for PFOS.
- No groundwater samples exceeded the adopted ecological or recreational human health screening criteria for PFOA.
- No groundwater samples exceeded the biota consumption human health screening criterion.
- First time detections:
 - 0020_MW071 (Captains Lagoon, pathway) reported a first time detection of PFOS+PFHxS (refer Table 10).
 - 0020_MW104 (Captains Lagoon, pathway) reported a first time detection of PFOS (refer Table 10).
 - No other groundwater locations reported first time detections of PFOS+PFHxS, PFOS, and/or PFOA.

Summary of surface water and tank water analytical results:

- 42 primary surface water and tank samples were collected as part of the October 2025 sampling event.
- 28 samples reported PFOS+PFHxS concentrations above the LOR.
- Nine samples reported PFOA concentrations above the LOR.

- Four primary samples reported concentrations exceeding the adopted the human health screening criteria for PFOS+PFHxS:
 - Two surface water samples exceeded the recreational human health screening criterion:
 - 0021_SW002 and 0021_SW153: Mary Creek, source locations.
 - Two surface water samples exceeded the biota consumption human health screening criterion:
 - 0021_SW079 and 0021_SW080: Clay Pools, receptor locations.
- Nine samples reported concentrations exceeding the adopted ecological criterion for PFOS.
- No surface water samples exceeded the adopted recreational human health or ecological screening criteria for PFOA.
- No surface water or tank locations reported first time detections of PFOS+PFHxS, PFOS, and/or PFOA (refer Table 11).
- No infrastructure tank samples reported concentrations exceeding the adopted the site specific human health screening criterion for RAN SSSS.

Summary of sediment analytical results:

- 19 primary samples were collected as part of the October 2025 sampling event.
- 15 samples reported PFOS+PFHxS concentrations above the LOR.
- One sample reported PFOA concentrations above the LOR.
- One sample (0021_SD069, Clay pools, receptor location) reported concentrations exceeding the site specific human health criterion for Clay Pools for PFOS+PFHxS. It is noted that the results are within one order of magnitude of the criterion.
- None of the primary samples collected within the Summercloud Creek catchment exceeded the human health ceremonial site specific criterion.
- First time detections:
 - 0020_SD024 (Captains Lagoon, receptor) reported a first time detection of PFOA (refer Table 12).
 - No other sediment locations reported first time detections of PFOS+PFHxS, PFOS, and/or PFOA.

4.3.2 Previous data

A comparison of the October 2025 event to historic analytical data is summarised in Table 10, Table 11, and Table 12 below.

All historical sampling results are presented in Tables B5a to B5j and B6a to B6c, Appendix B. Laboratory certificates are attached in Appendix F.

Groundwater

Table 10 Deviations from the historical dataset – groundwater

Item	Sample location	Catchment	Source-Pathway-Receptor	PFOS+PFHxS (µg/L)		PFOA (µg/L)		PFOS (µg/L)	
				October 2025	Previous Max	October 2025	Previous Max	October 2025	Previous Max
First time detections of PFOS+PFHxS, PFOS or PFOA?	0020_MW071	Captains Lagoon	Pathway	0.02	<0.01	NA	NA	NA	NA
	0020_MW104	Captains Lagoon	Pathway	NA	NA	NA	NA	0.01	<0.01
New exceedance of human health criteria?	NA	-	-	NA	NA	NA	NA	NA	NA
New exceedance of ecological criteria?	NA	-	-	NA	NA	NA	NA	NA	NA
New historical maximum?	0020_MW071	Captains Lagoon	Pathway	0.02	<0.01	NA	NA	NA	NA
	0020_MW104	Captains Lagoon	Pathway	0.02	0.01	NA	NA	0.01	<0.01
	0020_MW102S	Captains Lagoon	Pathway	NA	NA	NA	NA	0.12	0.09
	0021_MW063	Mary Creek	Source	3.33	2.71	0.06	0.05	2.3	1.70
	0021_MW071	Mary Creek	Pathway	NA	NA	NA	NA	1.76	0.83
	0021_MW103	Mary Creek	Source	NA	NA	2.79	2.07	NA	NA
	0021_MW121	Captains Lagoon	Source	0.51	0.34	NA	NA	NA	NA
	0021_MW150	Mary Creek	Source	25.7	24.7	NA	NA	22.2	22

- Two groundwater locations (0020_MW071 and 0020_MW104; Captains Lagoon pathway locations) reported first-time detections of PFOS+PFHxS and PFOS, respectively. Both of the first time detections are less than one order of magnitude higher than the previously reported maximum.
- There were no new exceedances of the adopted human health and ecological screening criteria.
- There were eight locations where new historical maximums were recorded, four are source locations and three are pathway locations. All reported concentrations less than one order of magnitude higher than the previously reported maximum. However, it is noted that 0021_MW103 reported the highest result for PFOS+PFHxS since 2018, but is within background range.
- Locations 0021_MW135, 0021_MW136, and 0021_MW137 recorded concentrations below the LOR.

Surface water and tank samples

Table 11 Deviations from the historical dataset – surface water and tank samples

Item	Sample location	Catchment	Source-Pathway-Receptor	PFOS+PFHxS (µg/L)		PFOA (µg/L)		PFOS (µg/L)	
				October 2025	Previous Max	October 2025	Previous Max	October 2025	Previous Max
First time detections of PFOS+PFHxS, PFOS or PFOA?	NA	-	-	NA	NA	NA	NA	NA	NA
New exceedance of human health criteria?	NA	-	-	NA	NA	NA	NA	NA	NA
New exceedance of ecological criteria?	NA	-	-	NA	NA	NA	NA	NA	NA
New historical maximum?	NA	-	-	NA	NA	NA	NA	NA	NA

- There were no first-time detections for PFOS+PFHxS, PFOS, and/or PFOA in the surface water samples analysed, and no new exceedances of the adopted human health and ecological screening criteria.
- No new historical maximums were reported.

Sediment

Table 12 Deviations from the historical dataset – sediment

Item	Sample location	Catchment	Source-Pathway-Receptor	PFOS+PFHxS (µg/L)		PFOA (µg/L)		PFOS (µg/L)	
				October 2025	Previous Max	October 2025	Previous Max	October 2025	Previous Max
First time detections of PFOS+PFHxS, PFOS or PFOA?	0020_SD024	Captains Lagoon	Receptor	NA	NA	0.0006	<0.005	NA	NA
New exceedance of human health criteria?	NA	-	-	NA	NA	NA	NA	NA	NA
New historical maximum?	0020_SD024	Captains Lagoon	Receptor	0.116	0.0118	0.0005	<0.005	0.1135	0.0144

- One location (0020_SD024; Captains Lagoon receptor location) reported a first-time detection of PFOA. The reported concentrations are less than one order of magnitude higher than the previously reported maximum.
- Location 0020_SD024 also reported a new historical maximum for PFOS+PFHxS and PFOS.
 - The reported concentrations were slightly less than one order of magnitude higher than the previously reported maximum.
 - Paired surface water sample 0020_SW010 reported PFOS+PFHxS and PFOA concentrations within the historical range of results.
 - PFAS concentrations at downgradient sediment location 0020_SD019 were within the historical range of results.
 - GHD requested a re-test of the primary sample, as well as the intra- and inter-laboratory duplicates collected at this location, which reported similar concentrations to the original result. There is some sample heterogeneity observed within the primary and duplicate samples with PFOS+PFHxS concentrations ranging between 0.0774 mg/kg (primary sample) and 0.116 mg/kg (intra-laboratory duplicate). For the purposes of this assessment, the highest value of the duplicate pairing has been adopted.
- There were no new exceedances of the adopted human health screening criteria.

5. Summary and recommendations

5.1 Summary of monitoring event

The findings and the recommended actions are summarised in Table 13 below.

Table 13 *Summary of October 2025 sampling event*

Item	Summary
Access to sampling locations	All sampling locations were accessible.
Locations dry or with no media	The following locations were dry / had no media: – Fifteen surface water locations were dry and not able to be sampled.
Damaged locations	The following locations were damaged: – 0021_MW028. – 0021_MW112. – 0021_MW110.
Wells requiring survey	The following wells are yet to be surveyed: – 0020_MW069. – 0020_MW070. – 0020_MW071.
Analytical results	– 76 primary groundwater samples were analysed – 39 primary surface water samples were analysed. – 19 primary sediment samples were analysed. – 3 primary tank water samples were analysed.
First-time detections of PFOS+PFHxS, PFOS and/or PFOA	The following first-time detections of PFOS+PFHxS, PFOS and/or PFOA were reported: – Two groundwater locations. – One sediment location. All detections were less than one order of magnitude higher than the LOR.
New exceedance of adopted human health screening criteria	No new exceedances of the adopted human health screening criteria were reported for PFOS+PFHxS, PFOS, or PFOA.
New exceedance of adopted ecological screening criteria	No new exceedances of the adopted ecological screening criteria were reported for PFOS+PFHxS, PFOS, or PFOA.
New historical maximum recorded	The following new historical maximums were recorded: – Groundwater – eight locations. – Sediment – one location. All locations reported concentrations were less than one order of magnitude higher than the previously reported maximum; however, it is noted that 0020_SD024 reported concentrations just below one order of magnitude. Analysis of the concentration trends will be performed for water results, and additional action may be necessary if a clear trend is determined.

5.2 Upcoming sampling events

The next OMP sampling event is scheduled for April 2026. Maintenance of 0021_MW028, 0021_MW110, 0021_MW113, and re-drilling of 0021_MW104 is scheduled for January 2026.

5.3 Upcoming ongoing monitoring report

The next OMR is scheduled to be delivered in Q4 2025, covering data collected within the 12 month sampling period.

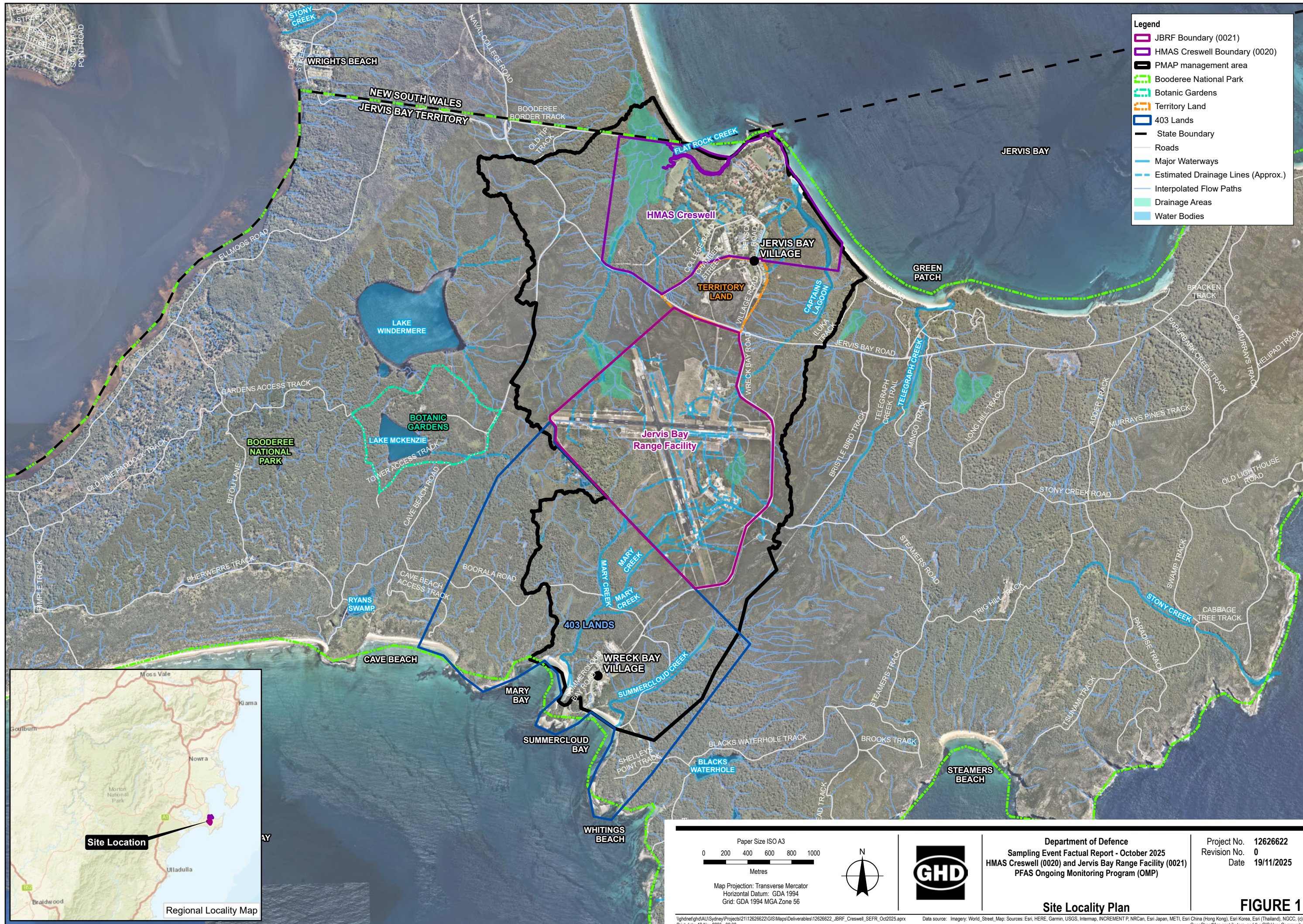
6. References

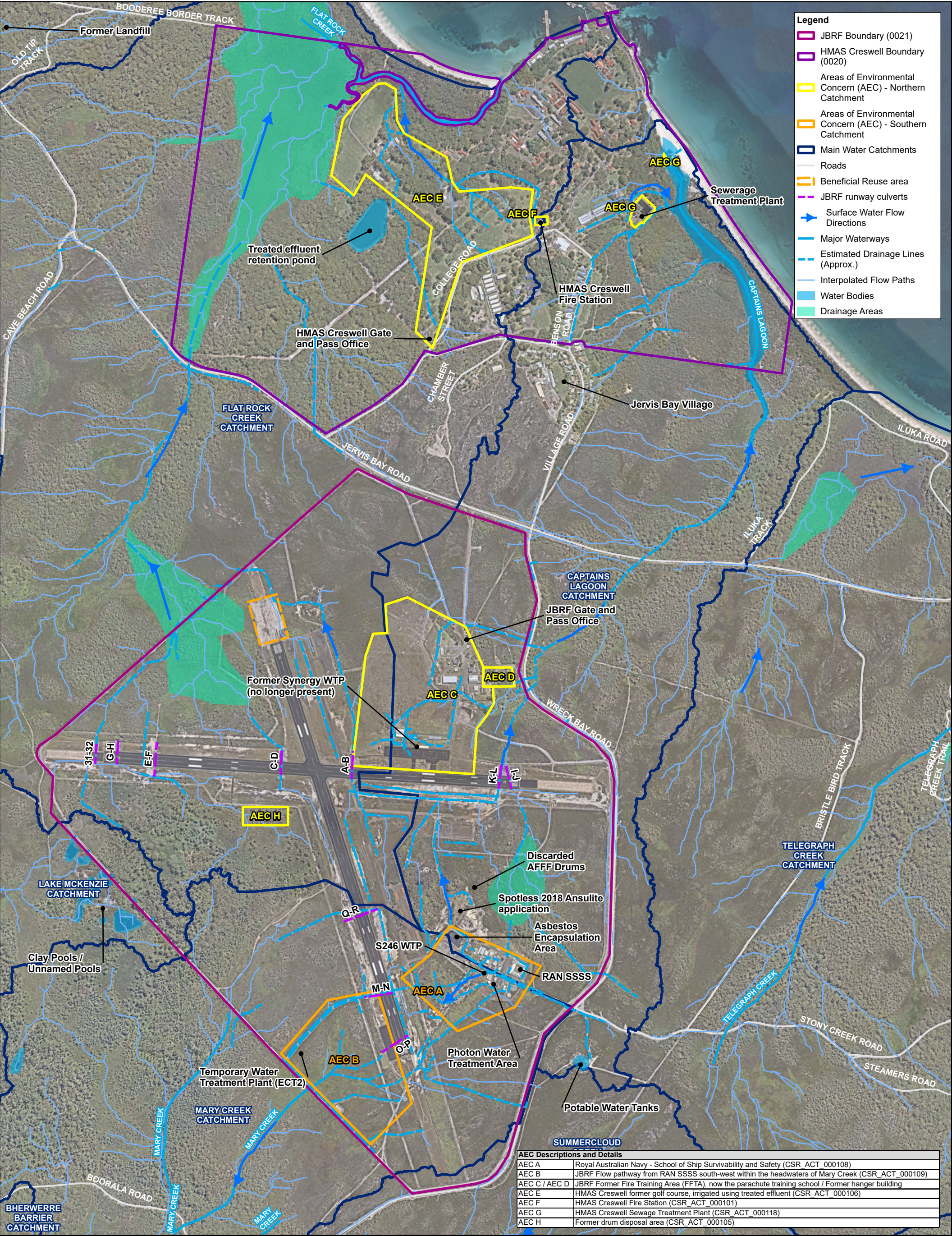
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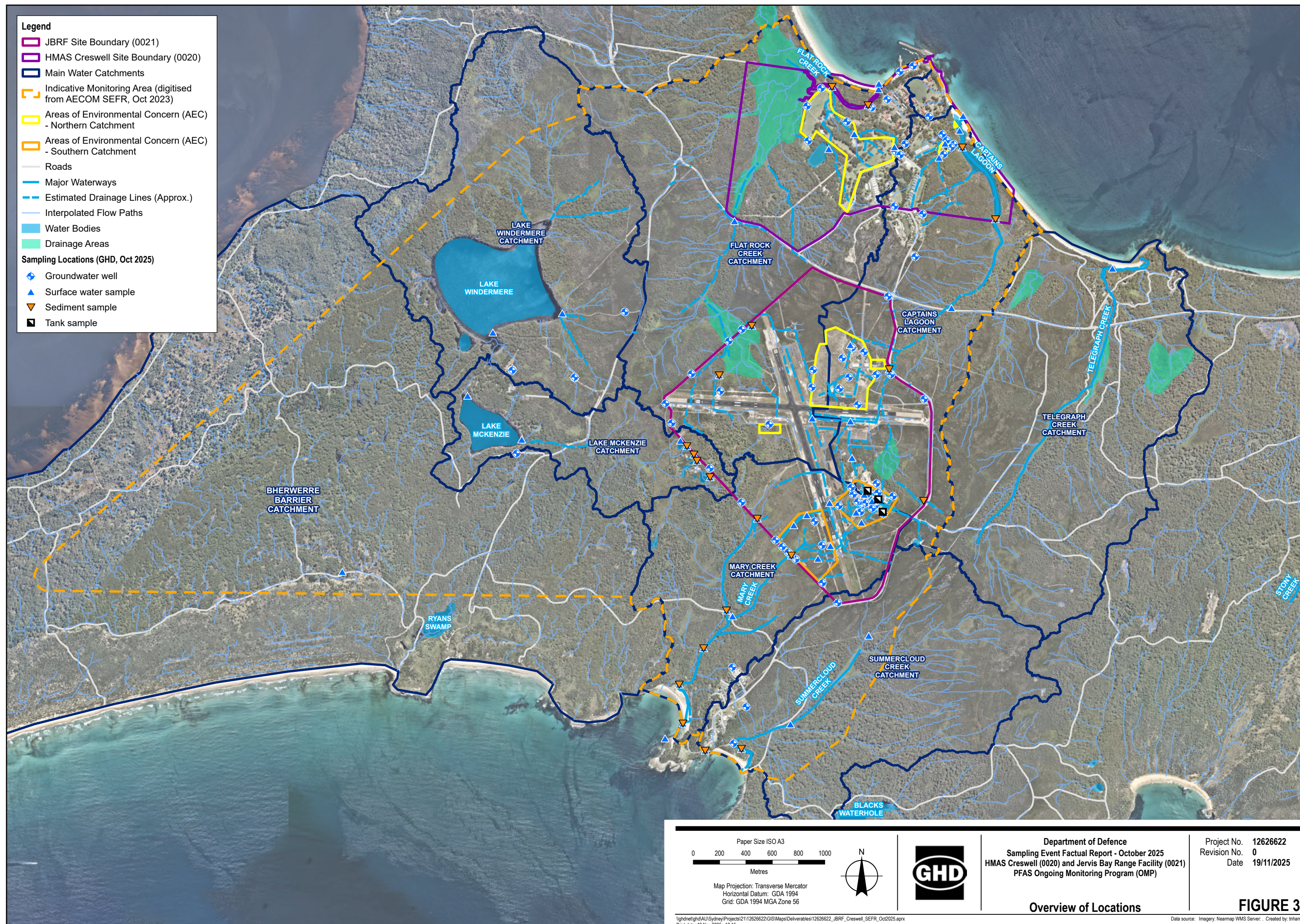
Appendices

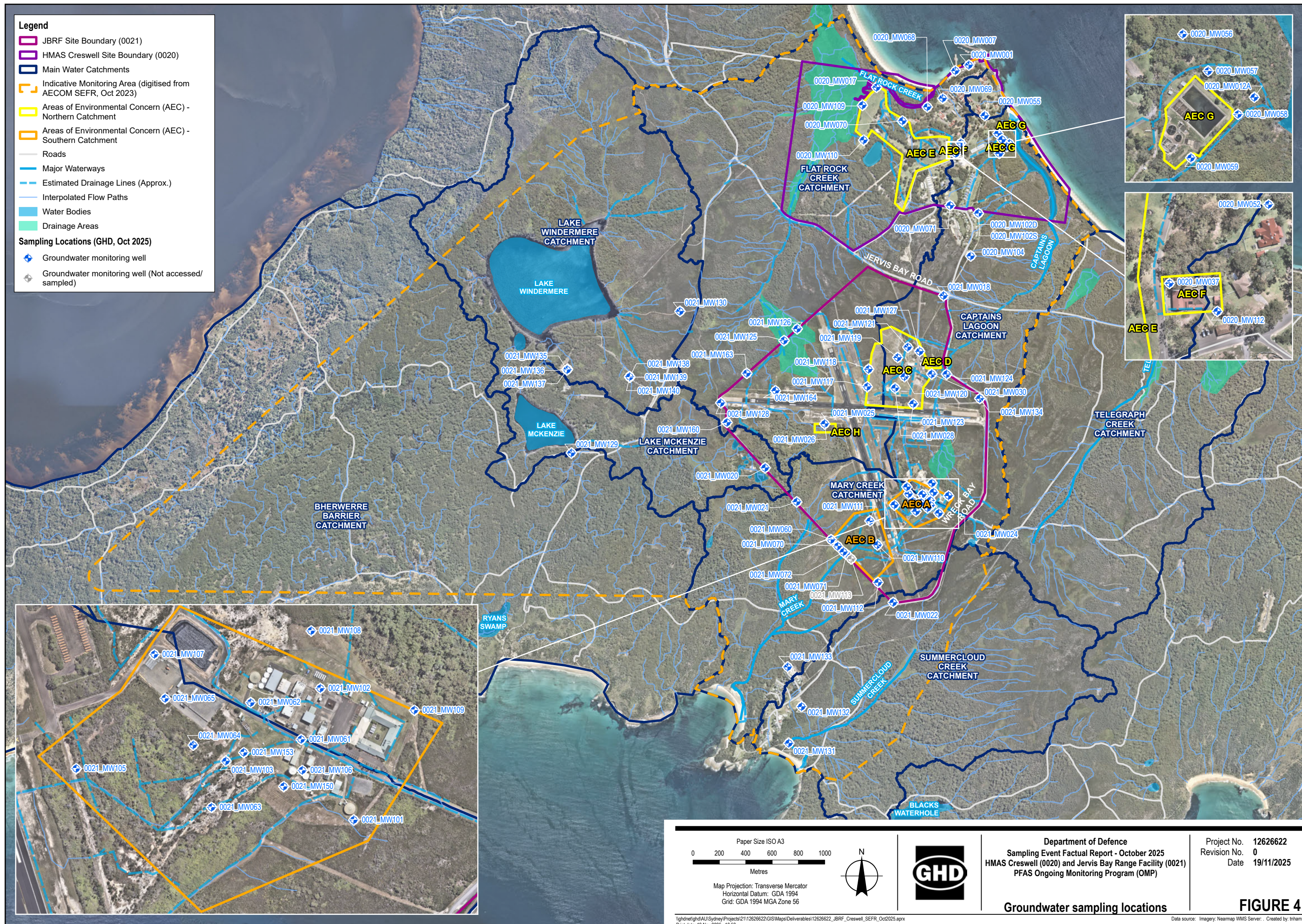
Appendix A

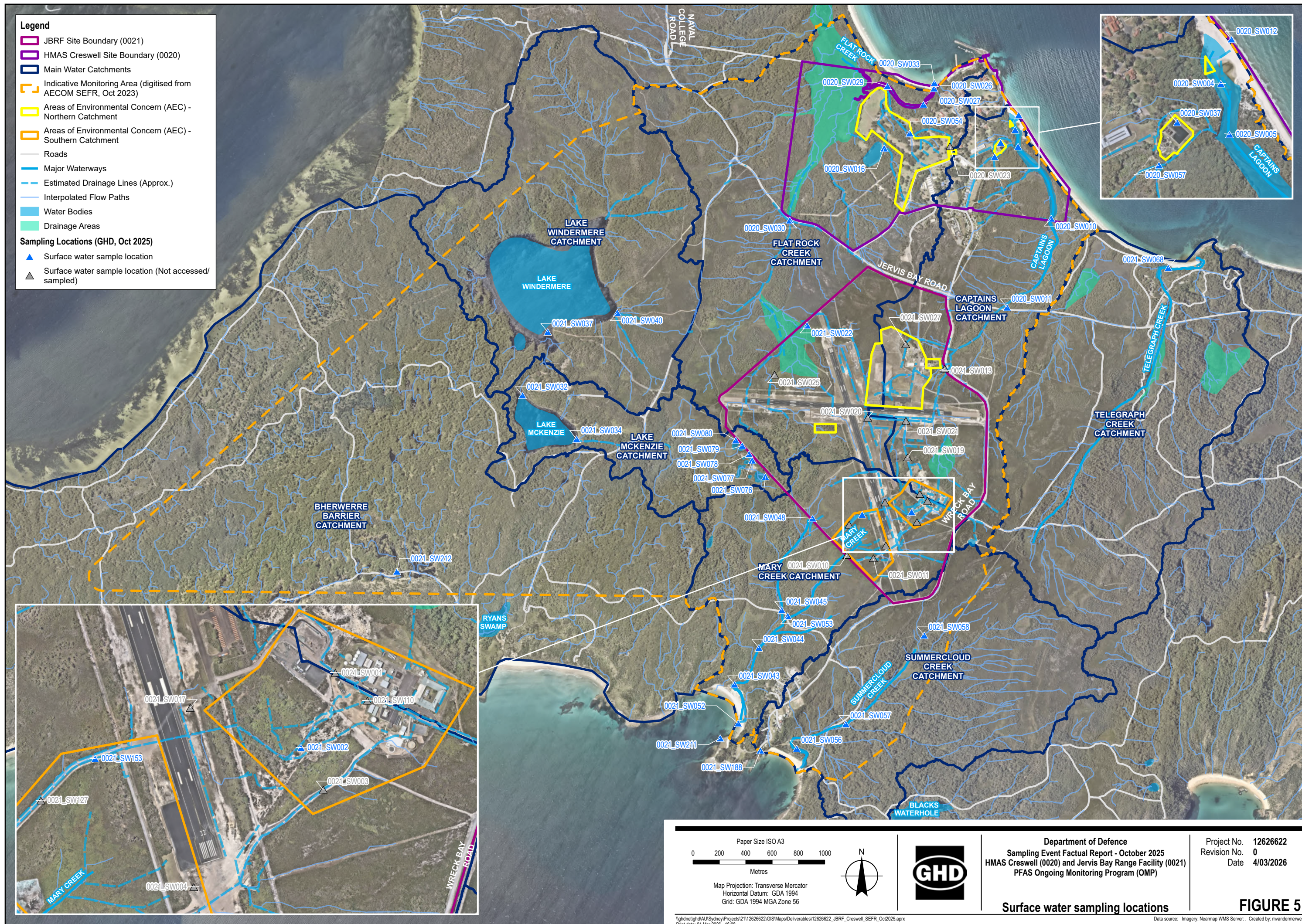
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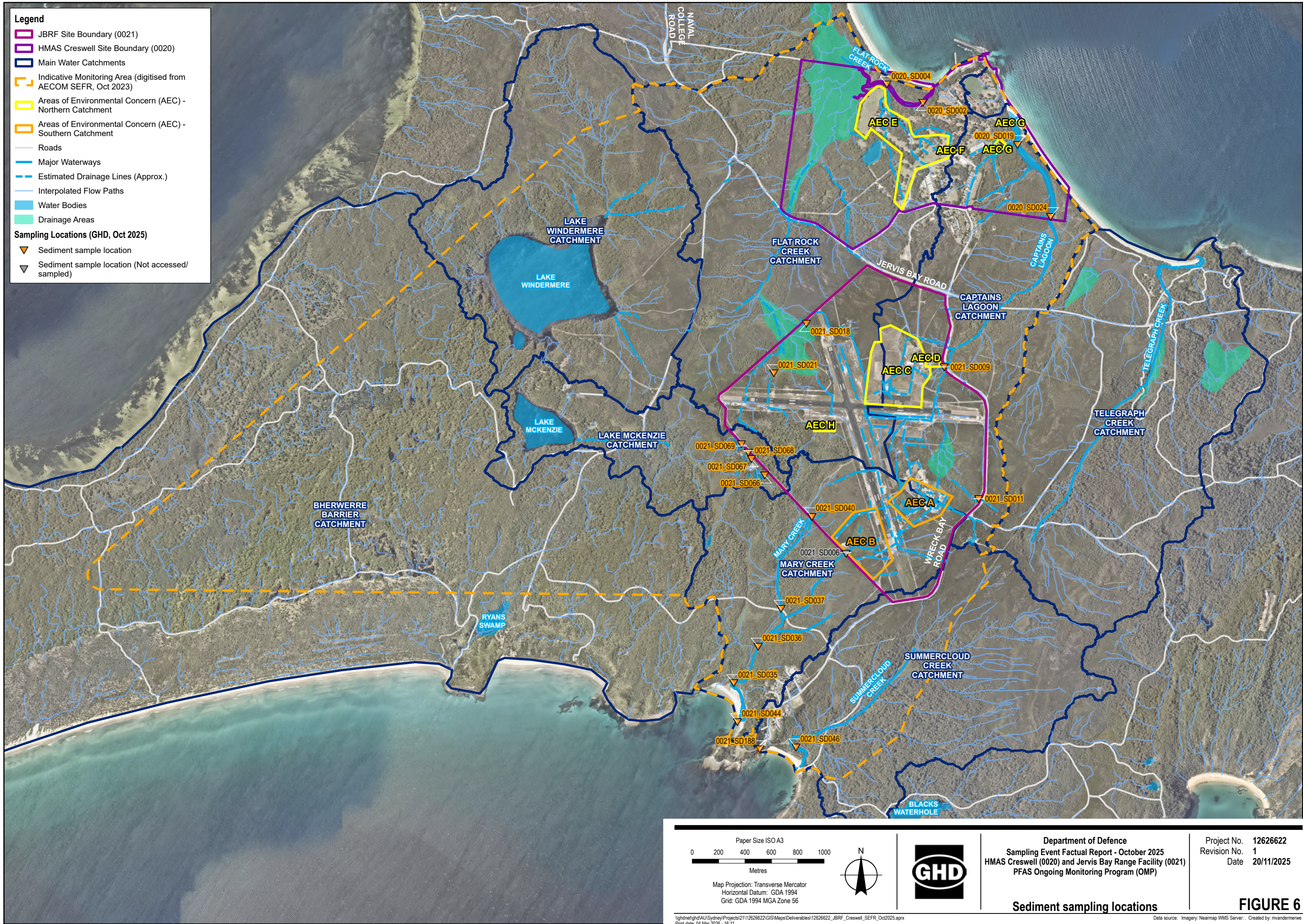


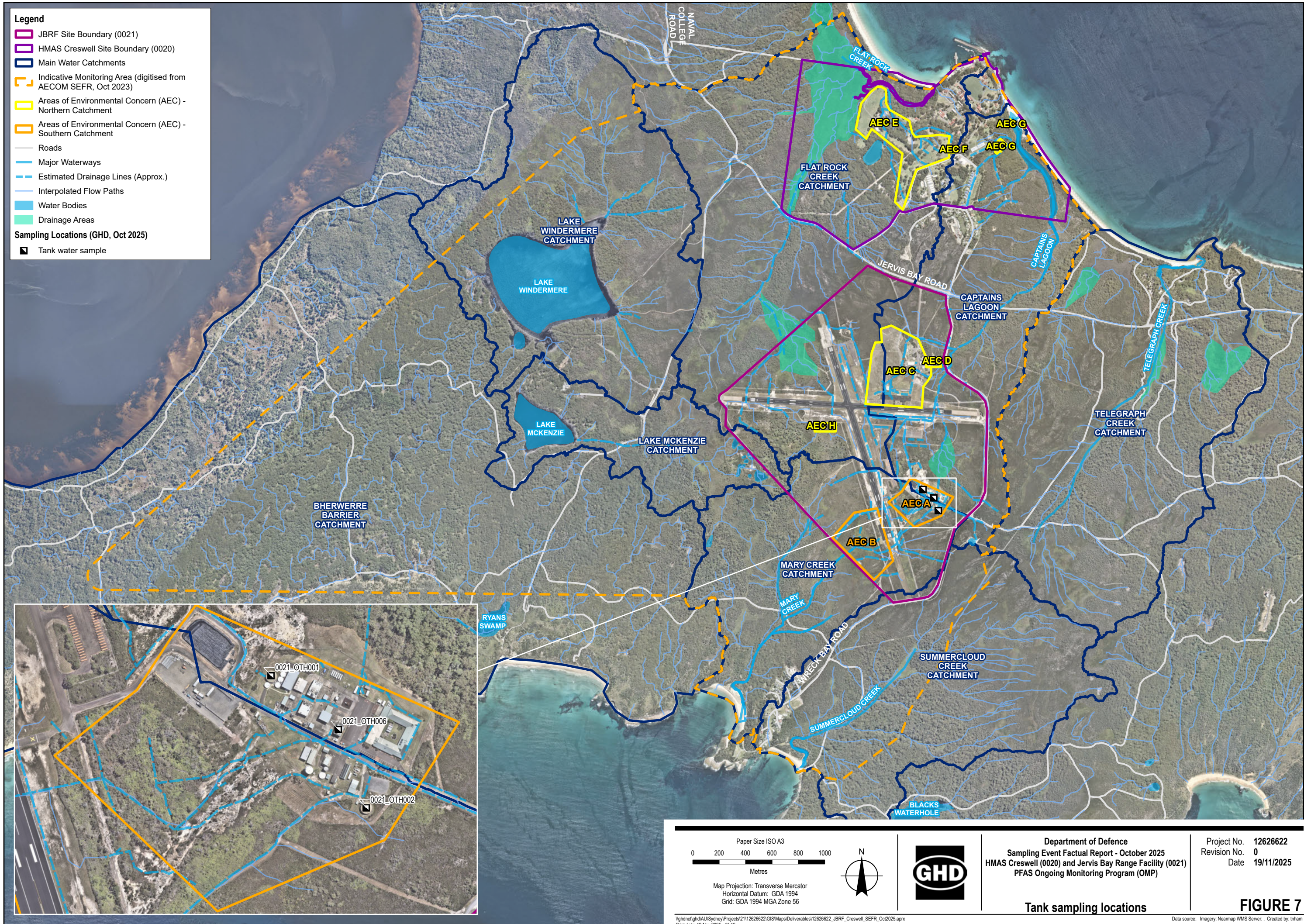


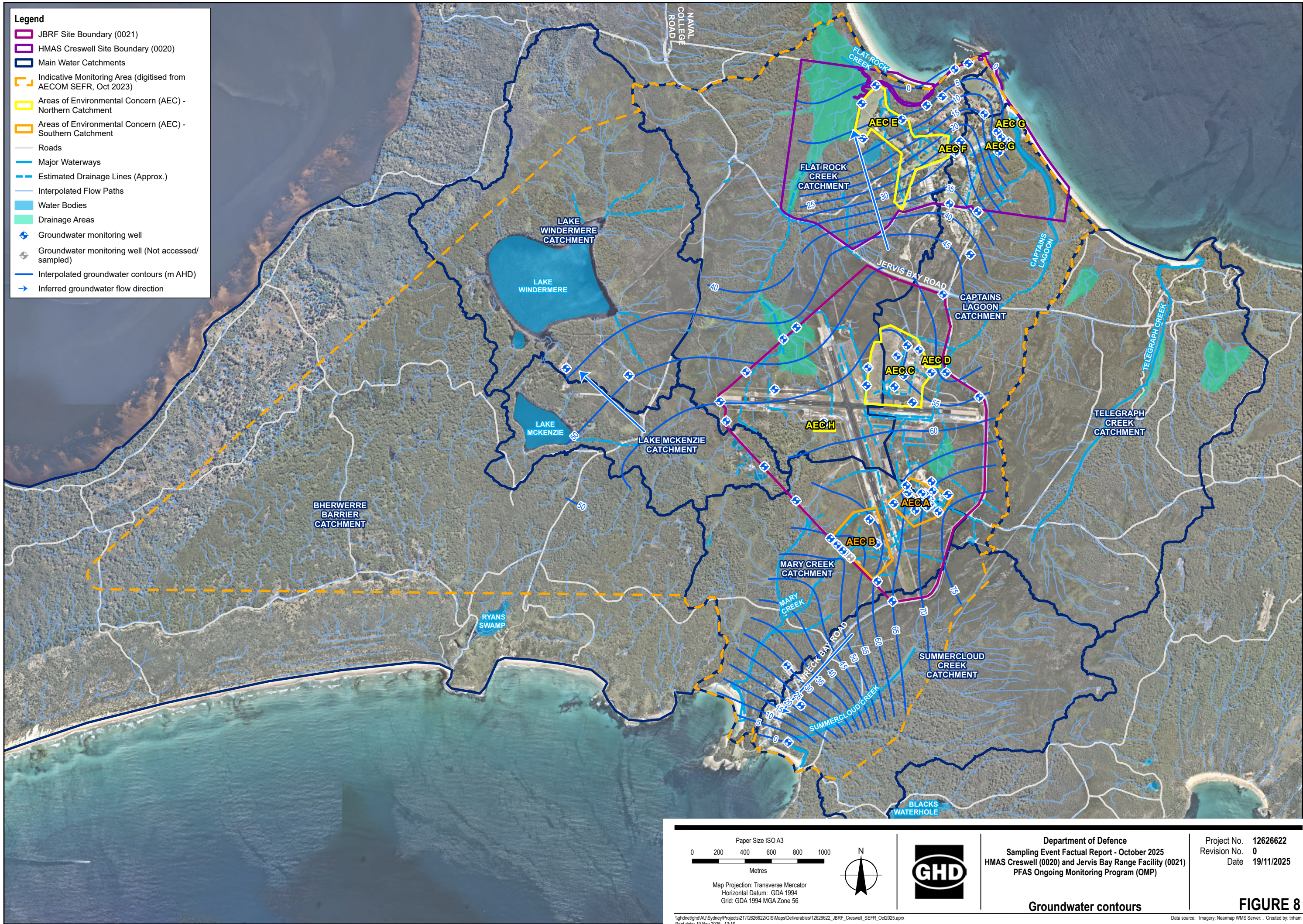


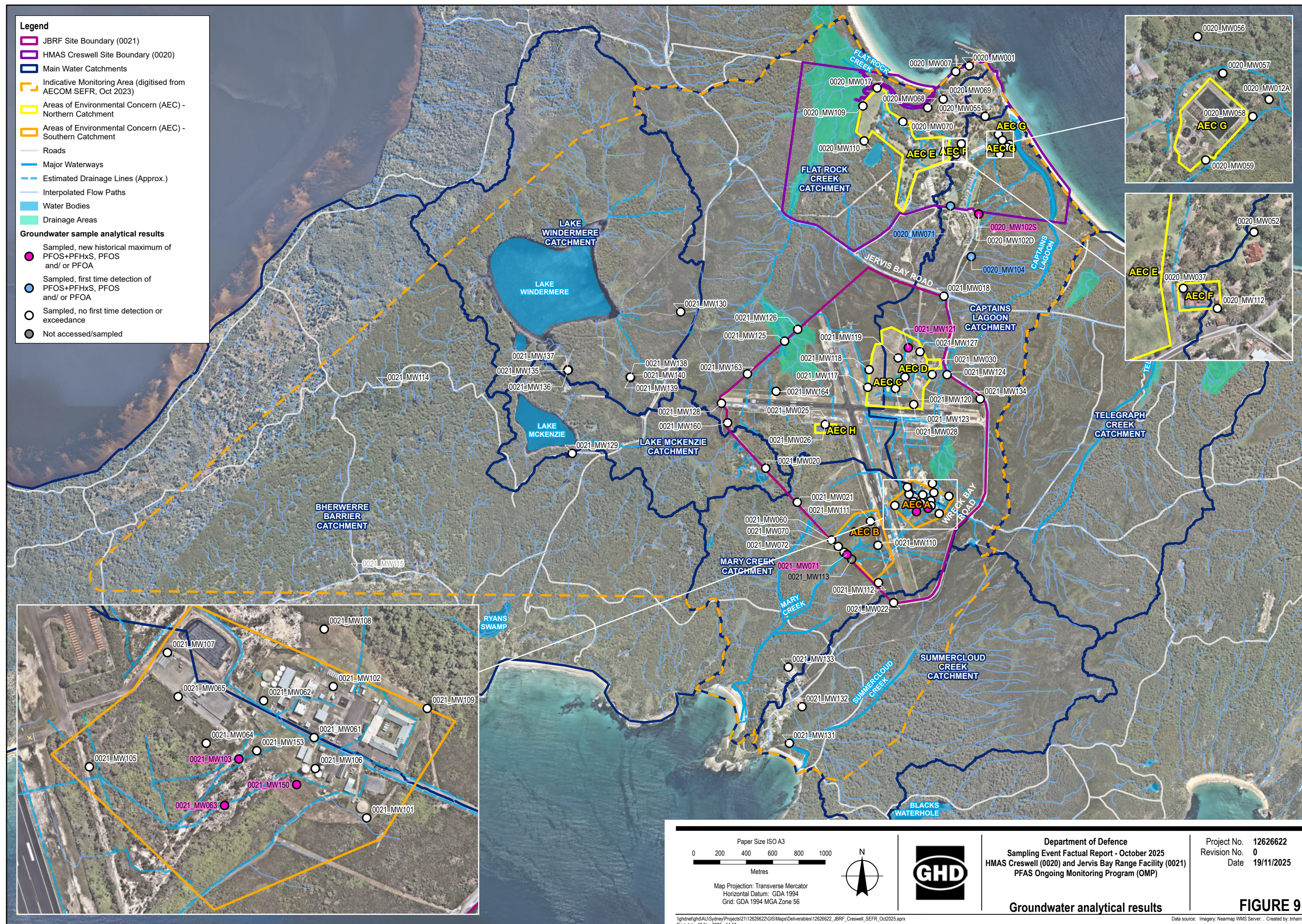


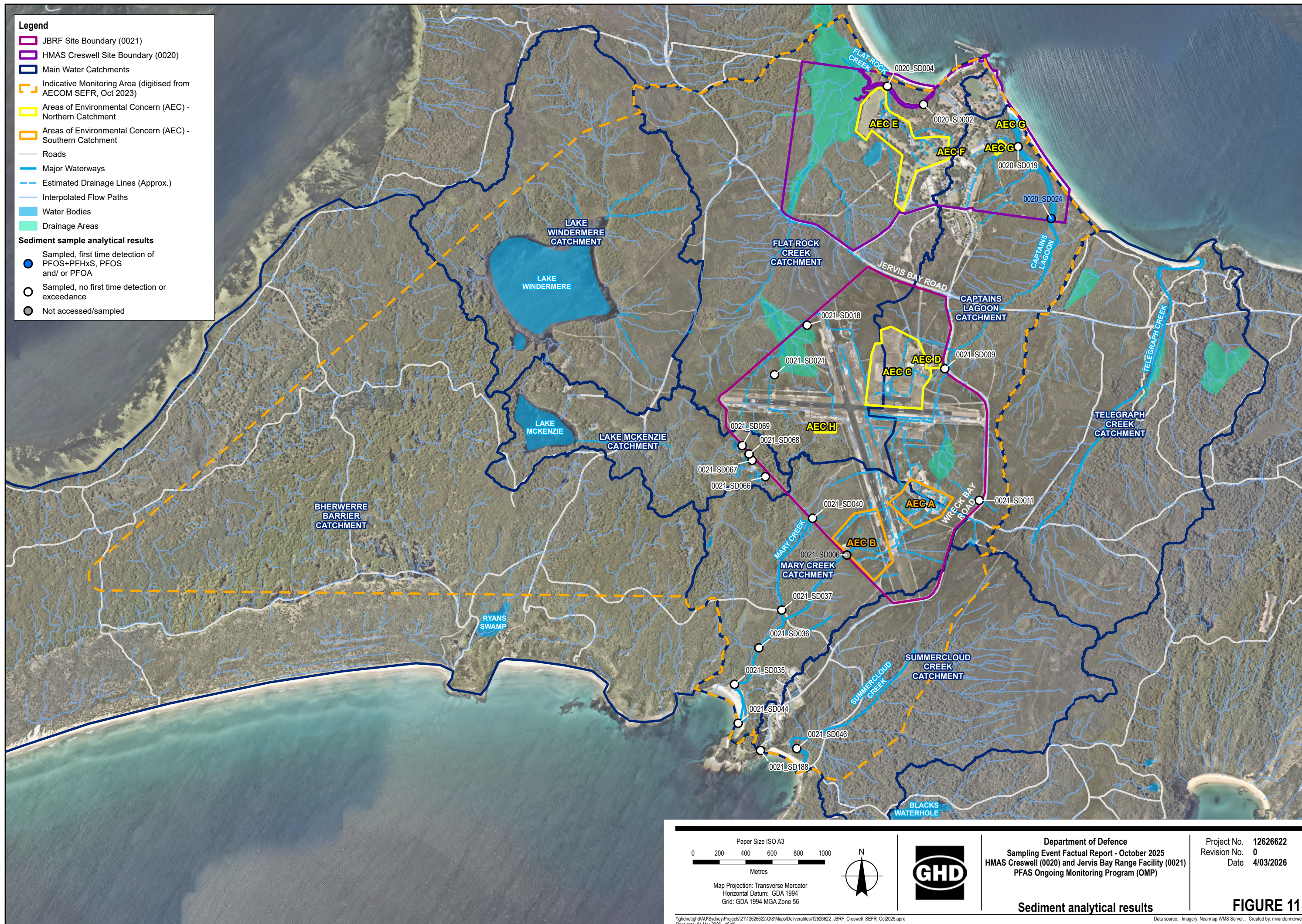












Appendix B

Results tables



Appendix B
Table B1
October 2025 OMP Groundwater Field Observations and
Parameters

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

EQL	Field data			Field Parameters				
	Total Well Depth	Standing Water Level	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field)	Redox (Field)	Temperature (Field)
	m bTOC	m bTOC	m AHD	pH units	µS/cm	mg/L	mV	°C
EQL	0.05	0.05	0.05	0.01	0.1	0.01	0.01	0.1

Catchment	SPR	Location	Date	Sample Description									
Captains Lagoon	Pathway	0020_MW012A	20 Oct 2025	Pale yellow, clear, slight rotten egg odour, no sheen, slight organic sediment. Good recharge.	6.238	2.172	1.729	5.23	342.6	0.01	-101.3	16.9	
Captains Lagoon	Pathway	0020_MW055	20 Oct 2025	Pale yellow, clear, moderate hydrogen sulfide odour, no sheen. Good recharge.	3.06	2.325	13.874	5.42	234	0.18	-158	18.9	
Captains Lagoon	Pathway	0020_MW056	20 Oct 2025	Clear, no odour, no sheen, no sediment. Good recharge.	4.43	2.02	6.035	5.31	138.3	0.08	111.3	16.6	
Captains Lagoon	Pathway	0020_MW057	20 Oct 2025	Clear, no odour, no sheen, no sediment. Good recharge.	4.542	1.722	4.328	6.01	264.2	0.11	-27.4	16.5	
Captains Lagoon	Pathway	0020_MW058	20 Oct 2025	Pale brown. Cloudy. No odour or sheen. Low-moderate turbidity.	5.87	3.893	2.238	4.72	145.7	0.02	-334	17.5	
Captains Lagoon	Pathway	0020_MW059	20 Oct 2025	Pale brown, no odour or sheen, moderate turbidity.	3.785	2.401	7.664	4.62	264.4	0.47	-211.1	18	
Captains Lagoon	Pathway	0020_MW070	20 Oct 2025	Pale yellow, clear, slight hydrogen sulfide odour, no sheen. Good recharge.	2.255	1.31	-	4.93	101.5	0.17	-128.5	18.8	
Captains Lagoon	Pathway	0020_MW071	20 Oct 2025	Pale orange, clear, no odour, no sheen, trace suspended orange sediment	11.841	3.879	-	4.21	732	1	336.9	19.1	
Captains Lagoon	Pathway	0020_MW102D	20 Oct 2025	Pale orange brown, cloudy, no odour or sheen, moderate turbidity.	9.59	2.364	33.028	5.4	393.4	0	-279	18.5	
Captains Lagoon	Pathway	0020_MW102S	20 Oct 2025	Coudy, pale brown, distinct decaying organic odour, no sheen, moderate turbidity.	2.806	2.191	33.197	5.26	322.1	0.04	-306.1	18.4	
Captains Lagoon	Pathway	0020_MW104	20 Oct 2025	Colourless, slightly turbid, no odour or sheen. Good recharge.	10.23	4.61	42.812	4.04	330	2.52	238.1	19.4	
Captains Lagoon	Pathway	0021_MW018	21 Oct 2025	Pale yellow-orange, slightly cloudy, no odour, no sheen, trace suspended sediment. Good recharge.	8.82	2.515	47.486	4.1	298.8	0.02	274.6	17.1	
Captains Lagoon	Pathway	0021_MW108	23 Oct 2025	Slight yellow tinge, no odour or sheen, non-turbid.	3.196	1.838	68.605	5.11	178.4	0.13	-240.9	18.1	
Captains Lagoon	Pathway	0021_MW124	23 Oct 2025	Pale yellow, clear, slight hydrogen sulfide odour, no sheen. Good recharge.	3.09	1.045	48.781	5.07	146.2	0.14	-168.4	16.6	
Captains Lagoon	Pathway	0021_MW134	22 Oct 2025	Colourless, slightly turbid, no odour or sheen. Good recharge.	7.69	4.12	55.187	4.01	253.6	2.61	212.2	20.2	
Captains Lagoon	Source	0020_MW052	20 Oct 2025	Pale yellow tinge, slightly cloudy, no odour, no sheen, no sediment.	1.801	1.01	26.652	4.51	97.5	2.31	177.3	18.5	
Captains Lagoon	Source	0021_MW028	21 Oct 2025	Slight pale yellow, clear, no odour or sheen. Good recharge.	6.87	1.35	56.466	5.71	1,758	0.06	52.5	18	
Captains Lagoon	Source	0021_MW030	22 Oct 2025	Pale yellow, slightly turbid, no odour or sheen. Ok recharge.	10.66	1.445	51.514	6.22	2,005	0.31	-45.1	18.3	
Captains Lagoon	Source	0021_MW062	22 Oct 2025	Cloudy, moderate hydrocarbon odour, no sheen or sediment. No recharge. [Temperature reading from water quality meter may be incorrect]	2.93	1.445	68.405	6.37	922	0.11	-268	23.4	
Captains Lagoon	Source	0021_MW102	22 Oct 2025	Cloudy and orange-grey, opaque, weak hydrocarbon odour, no sheen or sediment. [Temperature reading from water quality meter may be incorrect]	1.79	1.05	71.249	6.26	1,128	0.1	-211.1	26	
Captains Lagoon	Source	0021_MW109	22 Oct 2025	Pale yellow tinge, clear, moderate egg/sulfur odour, no sheen, no sediment	3.948	1.09	73.380	4.67	268.3	0.04	-164.1	18.4	
Captains Lagoon	Source	0021_MW119	21 Oct 2025	Colourless, clear, no odour or sheen. Poor recharge.	1.88	0.79	55.811	5.15	397.7	0.36	-22	18.1	
Captains Lagoon	Source	0021_MW120	21 Oct 2025	Clear, slight yellow-orange tinge, no odour, sheen or sediment. No recharge.	2.905	0.71	54.875	5.3	1,491	0.31	29.8	19.5	
Captains Lagoon	Source	0021_MW121	22 Oct 2025	Pale yellow, slightly turbid, no odour or sheen.	2.58	0.77	54.910	5.91	350.8	0.19	-208.8	20.2	
Captains Lagoon	Source	0021_MW123	21 Oct 2025	Slightly cloudy, no odour, sheen or sediment. Ok recharge. [Temperature reading from water quality meter may be incorrect]	2.87	1.22	56.748	5.03	390	0.35	35	19.1	
Captains Lagoon	Source	0021_MW127	22 Oct 2025	Colourless, slightly turbid, trace suspended brown particles, no odour or sheen. Good recharge.	6.63	1.315	53.175	4.04	638	0.03	-84.2	19.5	
Clay Pools	Receptor	0021_MW020	21 Oct 2025	Colourless, slightly turbid, slight hydrogen sulfide odour, no sheen. Good recharge.	8.62	2.16	59.990	5.63	783	0.07	-115.1	17.4	
Flatrock Creek	Pathway	0020_MW001	23 Oct 2025	Grey-brown, coudy, no odour or sheen, moderate to high turbidity.	5.455	2.254	0.656	5.58	247.2	0.91	-37.9	19.5	
Flatrock Creek	Pathway	0020_MW007	23 Oct 2025	Clear, no odour, no sheen, no sediment. Good recharge.	3.18	1.85	0.830	7.28	489	0.12	67.7	19.8	
Flatrock Creek	Pathway	0020_MW017	20 Oct 2025	Clear, yellow, very weak egg odour, no sheen or sediment. Good recharge. [Temperature reading from water quality meter may be incorrect]	4.905	1.45	0.548	5.03	867	0.02	-324	21.5	
Flatrock Creek	Pathway	0020_MW068	20 Oct 2025	Clear, no odour, sheen or sediment. Good recharge.	4.105	8.35	4.560	5.23	226.6	2.86	125.2	18.9	
Flatrock Creek	Pathway	0020_MW069	20 Oct 2025	Pale yellow, clear, no odour or sheen. Poor recharge but stable SWL.	11.75	5.77	-	4.9	216.3	3.92	161.7	20.6	
Flatrock Creek	Pathway	0020_MW109	20 Oct 2025	Cloudy, slight pale yellow, weak egg odour, trace orange suspended sediment, no sheen. Good recharge. [Temperature reading from water quality meter may be incorrect]	2.75	1.49	2.142	5.2	691	0.05	-275.3	20	
Flatrock Creek	Pathway	0020_MW110	20 Oct 2025	Cloudy, pale brown, trace suspended sediment, no odour or sheen. [Temperature reading from water quality meter may be incorrect]	3.02	1.165	6.859	5.85	714	0.1	-279.3	20	
Flatrock Creek	Pathway	0021_MW125	22 Oct 2025	Pale yellow, suspended brown particles, slightly turbid, no odour or sheen. Very poor recharge.	3.655	1.36	46.770	5.3	166	0.39	-100.8	18.1	
Flatrock Creek	Pathway	0021_MW126	22 Oct 2025	Pale yellow, slightly turbid, no odour or sheen. Ok recharge.	9.7	1.19	45.910	5.86	469.7	0.03	-115.4	17.5	
Flatrock Creek	Pathway	0021_MW128	21 Oct 2025	Colourless, clear, no sediment, slight hydrogen sulfide odour, no sheen.	5.97	2.24	54.811	4.23	903	0.08	-119.6	17.8	
Flatrock Creek	Pathway	0021_MW160	21 Oct 2025	Pale yellow, clear, no odour or sheen. Good recharge.	6.865	2.35	56.661	4.49	186	0.05	40.2	17.5	
Flatrock Creek	Pathway	0021_MW163	22 Oct 2025	Clear, no odour or sheen. Ok recharge.	3.6	1.8	51.215	3.9	260.4	0.42	246.5	17	
Flatrock Creek	Pathway	0021_MW164	21 Oct 2025	Mostly clear, yellow-orange, slight egg odour, no sheen or sediment. [Temperature reading from water quality meter may be incorrect]	2.33	0.595	53.444	5.58	329.6	0.07	-170.7	19.2	
Flatrock Creek	Source	0020_MW037	20 Oct 2025	Clear, no odour, no sheen , no sediment.	6.931	3.866	27.233	3.9	382.9	0.37	269.6	18.9	
Flatrock Creek	Source	0020_MW112	20 Oct 2025	Pale brown, cloudy, no odour or sheen, low-moderate turbidity.	3.852	1.21	30.336	4.24	529	0.57	-123.3	19	
Flatrock Creek	Source	0021_MW026	21 Oct 2025	Colourless, slightly turbid, slight hydrogen sulfide odour, no sheen. Poor recharge.	8.61	2.16	58.635	5.12	755	0.11	-99.9	18.5	
Flatrock Creek	Source	0021_MW117	21 Oct 2025	Cloudy, orange, fine orange suspended sediment, no odour or sheen. [Temperature reading from water quality meter may be incorrect]	1.9	0.65	56.260	6.31	904	0.78	-129.5	20.2	
Flatrock Creek	Source	0021_MW118	21 Oct 2025	Mostly clear, orange tinge, no odour, sheen or sediment. [Temperature reading from water quality meter may be incorrect]	2.91	0.42	55.763	6.68	1,120	0.45	-180.6	19.5	
Lakes	Pathway	0021_MW129	21 Oct 2025	Clear, no odour, no sheen, no sediment.	31.47	16.361	31.333	4.78	290.3	0.09	-37.9	16	
Lakes	Pathway	0021_MW130	21 Oct 2025	Clear, no odour, no sheen, trace suspended grey sediment. Poor recharge.	35.69	6.585	49.670	6.13	334.5	1.74	-67.6	17.5	
Lakes	Pathway	0021_MW135	22 Oct 2025	Pale yellow tinge, clear, no odour, no sheen, no sediment. Good recharge.	40.88	11.286	36.254	5.04	291.2	0.04	29.5	17.4	
Lakes	Pathway	0021_MW136	22 Oct 2025	Clear, very slight orange, moderate egg/sulfur odour, no sheen or sediment. [Temperature reading from water quality meter may be incorrect]	26.66	4.86	42.773	4.85	453.1	0.15	-177	19.6	
Lakes	Pathway	0021_MW137	22 Oct 2025	Clear, faint egg/sulfuric odour, no sheen, no sediment	11.82	3.505	44.203	4.68	286.6	0.01	-66.7	17	
Lakes	Pathway	0021_MW138	21 Oct 2025	Clear, some suspended grey particles, slight decaying odour, no sheen. non-turbid	41.16	5.774	46.426	6.38	570	0.09	-280.6	17.6	
Lakes	Pathway	0021_MW139	21 Oct 2025	Clear, slight yellow tinge, no odour or sheen.	21.35	4.171	48.049	6.26	329.2	1.04	-167.3	17.5	
Lakes	Pathway	0021_MW140	21 Oct 2025	Slightly cloudy, pale brown, no odour or sheen, suspended orange particles.	12.725	2.522	49.548	5.62	340.4	0.11	-242.9	17.4	
Mary Creek	Pathway	0021_MW021	21 Oct 2025	Pale orange, clear, no odour or sheen. Good recharge.	8.775	1.65	58.715	4.21	972	0.16	242.5	17.5	
Mary Creek	Pathway	0021_MW060	23 Oct 2025	Grey-brown, cloudy, decaying organic odour, no sheen, moderate-high turbidity	3.457	2.013	54.447	5.43	243.5	0.13	-189.2	17.9	
Mary Creek	Pathway	0021_MW070	23 Oct 2025	Clear, faint egg/sulphur odour, no sheen, no sediment	4.638	1.661	53.409	4.74	215.5	0.07	-105.3	16.2	
Mary Creek	Pathway	0021_MW071	23 Oct 2025	Clear, faint egg/sulfuric odour, no sheen, no sediment	3.134	0.855	50.775	5.35	274.7	0.04	-155.4	16.7	
Mary Creek	Pathway	0021_MW072	23 Oct 2025	Pale yellow tinge, clear, no odour, no sheen, trace brown suspended sediment	3.515	1.045	51.145	5.18	259	0.21	-114.5	16.9	



Appendix B
Table B1
October 2025 OMP Groundwater Field Observations and
Parameters

	Field data			Field Parameters				
	Total Well Depth	Standing Water Level	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field)	Redox (Field)	Temperature (Field)
	m bTOC	m bTOC	m AHD	pH units	µS/cm	mg/L	mV	°C
EQL	0.05	0.05	0.05	0.01	0.1	0.01	0.01	0.1

Catchment	SPR	Location	Date	Sample Description								
Mary Creek	Pathway	0021_MW112	23 Oct 2025	Pale yellow tinge, clear, no odour, no sheen, no sediment	2.923	1.975	60.974	4.42	652	2.93	216.2	18.6
Mary Creek	Pathway	0021_MW133	21 Oct 2025	Pale yellow tinge, clear, no odour, no sheen, trace suspended orange organics	10.778	4.402	29.959	4.62	365.2	0.02	201.5	16.8
Mary Creek	Source	0021_MW061	23 Oct 2025	Slight orange, slightly cloudy, weak egg/sulfur odour, no sheen or sediment. Good recharge. [Temperature reading from water quality meter may be incorrect]	2.5	0.64	70.950	6.14	1,129	0.03	-265.4	21.7
Mary Creek	Source	0021_MW063	22 Oct 2025	Clear, slight yellow tingle, no odour or sheen.	8.03	0.963	67.717	4.1	343.3	0.02	-196.6	20.1
Mary Creek	Source	0021_MW064	22 Oct 2025	Clear, pale orange, slight decaying organic odour, no sheen	6.03	1.857	66.403	5.13	189.8	0.11	-287.1	18.5
Mary Creek	Source	0021_MW065	22 Oct 2025	Clear, pale yellow colour, mild decaying odour, no sheen, non-turbid	6.035	1.972	66.178	6.14	725	0.01	-356.2	18.2
Mary Creek	Source	0021_MW101	23 Oct 2025	Cloudy pale orange-grey, opaque, no odour, sheen or sediment. No recharge. [Temperature reading from water quality meter may be incorrect]	1.98	1.025	74.059	5.82	1,100	1.67	74.8	20.6
Mary Creek	Source	0021_MW103	22 Oct 2025	Clear, slight yellow tinge, no odour or sheen	2.789	1.139	67.717	5.34	671	2.01	-140.2	20.1
Mary Creek	Source	0021_MW105	23 Oct 2025	Pale orange, no odour or sheen, suspended orange flocculation, low turbidity	2.9	1.268	63.023	5.16	205.3	0.32	-193.2	17.6
Mary Creek	Source	0021_MW106	22 Oct 2025	Pale yellow tinge, clear, faint egg/sulfur odour, no sheen, slight sediment	2.398	1.121	71.807	6.12	424.9	0.53	80.4	19.3
Mary Creek	Source	0021_MW107	23 Oct 2025	Orange, no odour or sheen, suspended orange flocculation, moderate turbidity.	4.705	1.51	65.681	5.75	482.3	0.04	-243.1	18.5
Mary Creek	Source	0021_MW110	23 Oct 2025	Brown, slightly turbid, slight organic odour, no sheen. Good recharge.	2.68	1.59	58.459	5.08	197.2	0.08	-168.5	18.1
Mary Creek	Source	0021_MW111	23 Oct 2025	Pale yellow, slightly turbid, no odour or sheen. Good recharge.	2.2	1.51	59.607	5.01	86.8	0.28	-84.8	18.8
Mary Creek	Source	0021_MW150	23 Oct 2025	Clear, no odour, no sheen, no sediment	5.021	0.15	71.360	4.06	270.4	0.08	256.8	17.4
Mary Creek	Source	0021_MW153	23 Oct 2025	Clear, no odour, no sheen, no sediment	4.829	0.866	68.494	4	319.7	0.02	267.1	17
Summercloud Creek	Pathway	0021_MW022	23 Oct 2025	Pale orange, no odour or sheen, low turbidity. Good recharge.	7.435	2.21	64.949	4.07	208.8	0	-273.8	18.1
Summercloud Creek	Pathway	0021_MW131	21 Oct 2025	Brown tinge, decaying organic odour, no sheen, low-moderate turbidity. Good recharge.	7.835	3.862	0.905	6.84	1,163	0.04	-337.4	16
Summercloud Creek	Pathway	0021_MW132	21 Oct 2025	Slightly cloudy, slight brown tinge, no odour or sheen, low turbidity.	12.02	4.101	22.492	5.59	453.9	0.01	-281.3	17.8

Statistics												
Number of Results					76	76	73	76	76	76	76	76
Number of Detects					76	76	73	76	76	76	76	76
Minimum Concentration					1.79	0.15	0.55	3.9	86.8	0	-356.2	16
Minimum Detect					1.79	0.15	0.55	3.9	86.8	0	-356.2	16
Maximum Concentration					41.16	16.361	74.06	7.28	2,005	3.92	336.9	26
Maximum Detect					41.16	16.361	74.06	7.28	2,005	3.92	336.9	26
Average Concentration *					7.5	2.5	44.77	5.2	496	0.46	-75	19



Appendix B
Table B2
October 2025 OMP Surface Water and Tank Sample Field Observations and
Parameters

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	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	0.01

Catchment	SPR	Location	Date	Sample Description							
Bherwerre Barrier	Receptor	0021_SW212	21 Oct 2025	Pale yellow tinge, clear, no odour, no sheen, algae on surface at edge of water body	7.47	516	4.88	56	31.2	21.6	357.5
Captains Lagoon	Pathway	0020_SW011	20 Oct 2025	Clear, brown tinge, no odour or sheen, film on the surface	5.22	136.9	5.73	58.8	196.7	16.6	105.3
Captains Lagoon	Pathway	0020_SW057	20 Oct 2025	Clear, tannin brown colour, no odour or sheen, some white foam accumulated on surface of pool.	5.41	175.5	5.47	56.1	-13.6	16.4	136.5
Captains Lagoon	Receptor	0020_SW004	20 Oct 2025	Clear, no odour, no sheen, no sediment	7.17	31,261	5.47	71.1	44.2	22.5	21,320
Captains Lagoon	Receptor	0020_SW005	20 Oct 2025	Clear, no odour, no sheen	7.1	31,421	4.63	60.3	-66.1	22.6	21,424
Captains Lagoon	Receptor	0020_SW010	20 Oct 2025	Clear, slight tannin brown, no odour or sheen, non-turbid	6.85	32,106	3	42.4	-83.4	24.1	21,216
Captains Lagoon	Receptor	0020_SW012	20 Oct 2025	Clear, no odour, no sheen	7.91	54,165	4.62	64.2	-49.1	20.2	38,805
Clay Pools	Receptor	0021_SW076	23 Oct 2025	Pale yellow, clear, no odour or sheen, trace algae.	5.41	194.2	1.01	10.5	-43.6	18	145.9
Clay Pools	Receptor	0021_SW077	23 Oct 2025	Brown, slightly turbid, no odour or sheen	5.25	241.4	1.93	19.7	-127.9	16.9	185.6
Clay Pools	Receptor	0021_SW078	23 Oct 2025	Pale yellow, clear, no odour or sheen.	5.72	188.2	2.29	24.9	162.3	19.1	137.9
Clay Pools	Receptor	0021_SW079	23 Oct 2025	Brown, slightly turbid, some suspended brown organics, no odour or sheen.	5.4	159.1	4.11	41.4	108.6	15	127.6
Clay Pools	Receptor	0021_SW080	23 Oct 2025	Pale brown, clear, some suspended brown organics, no odour or sheen.	5.82	109.3	4	43.2	171.7	19	80.1
Flatrock Creek	Source	0020_SW016	20 Oct 2025	Clear, no odour or sheen.	7.44	408.2	5.76	67	59	22.4	279.1
Flatrock Creek	Pathway	0020_SW030	22 Oct 2025	Pale orange tinge, clear, no odour, no sheen	4.53	142.6	9.73	98.6	283.2	15.8	112.45
Flatrock Creek	Pathway	0020_SW054	20 Oct 2025	Clear, brown tinge, no odour or sheen. [Temperature reading from water quality meter may be incorrect]	5.74	961	4.1	49.7	-14.3	24.9	626
Flatrock Creek	Pathway	0021_SW022	22 Oct 2025	Brown, clear, no odour, brittle (organic) sheen.	5.98	209	3.77	45.4	36.5	26.1	133.1
Flatrock Creek	Receptor	0020_SW026	20 Oct 2025	Clear, no odour or sheen.	8.23	50,645	5.2	52.5	6.6	20.1	36,301
Flatrock Creek	Receptor	0020_SW027	20 Oct 2025	Pale yellow, clear, no odour or sheen	7.93	45,748	5.99	80.3	16.3	19.8	32,970
Flatrock Creek	Receptor	0020_SW029	20 Oct 2025	Pale yellow-orange tinge, clear, no odour or sheen.	7.87	43,000	4.92	63.9	98	19.3	32,604
Flatrock Creek	Receptor	0020_SW033	20 Oct 2025	Clear, no odour or sheen.	8.21	51,726	3.85	53.1	27.7	20.4	36,848
Lakes	Receptor	0021_SW032	22 Oct 2025	Pale yellow tinge, clear, faint organic odour, no sheen	5.65	180.4	6.14	71.4	269	21	127.4
Lakes	Receptor	0021_SW034	22 Oct 2025	Pale yellow tinge, clear, faint organic odour, no sheen	5.48	186.5	5.27	57.7	248.6	20.2	133.25
Lakes	Receptor	0021_SW037	21 Oct 2025	Clear, tannin brown tinge, no odour or sheen	5.92	109.5	6.35	71	-79.6	21.3	76.7
Lakes	Receptor	0021_SW040	21 Oct 2025	Tannin brown tinge, no odour or sheen, non-turbid	5.95	111.4	4.44	49.9	-82.9	21.1	78
Mary Creek	Source	0021_SW002	22 Oct 2025	Clear, no odour, non-turbid, brittle bacterial sheen.	5.9	404	1.1	11.5	-100.1	17	306.15
Mary Creek	Source	0021_SW153	23 Oct 2025	Clear, slight orange-brown tinge, no odour or sheen. [Temperature reading from water quality meter may be incorrect]	7.34	1,228	5.15	66.8	-14.9	26.7	746
Mary Creek	Pathway	0021_SW044	21 Oct 2025	Pale yellow tinge, clear, organic odour, no sheen, white filmy foam substance on surface	6.37	312.1	5.82	59.8	98.6	16.8	239.2
Mary Creek	Pathway	0021_SW045	21 Oct 2025	Yellow-brown tinge, clear, no odour, no sheen	5.24	278.8	6.16	62.7	181.2	16.4	216.45
Mary Creek	Pathway	0021_SW048	21 Oct 2025	Clear, pale brown tinge, no odour or sheen	5.12	281	1.2	12.6	-148.3	17.9	211.25
Mary Creek	Pathway	0021_SW053	21 Oct 2025	Yellow-brown tinge, clear, no odour, no sheen, no sediment	4.98	240.6	2.01	20.8	172.5	16.9	184.6
Mary Creek	Receptor	0021_SW043	21 Oct 2025	Clear, pale yellow tinge, no odour, no sheen	6.08	353.5	2.42	25.5	77.7	17.1	270.4
Mary Creek	Receptor	0021_SW052	21 Oct 2025	Clear, no odour, no sheen, no sediment	7.59	20,908	7.25	83.7	113.3	17.4	12,311
Mary Creek	Receptor	0021_SW211	21 Oct 2025	Clear, no odour, no sheen	7.87	48,335	9.36	119.5	148.9	15.5	33,363
RAN SSSS	Tank	0021_OTH001	22 Oct 2025	Clear, no odour, no sheen	6.3	215.6	6.67	75.4	612.1	22.3	144.3
RAN SSSS	Tank	0021_OTH002	22 Oct 2025	Clear, no odour, no sheen	6.55	1,062	6.55	74.3	476.5	20.7	754
RAN SSSS	Tank	0021_OTH006	22 Oct 2025	Clear, no odour, no sheen	2.87	3,304	5.22	64.1	1,051.1	25.5	2,125
HMAS Creswell STP	Tank	0020_SW037	20 Oct 2025	Pale yellow tinge, clear, no odour, no sheen, some suspended micro organisms	5.62	668	4.5	50.5	60.8	22	461.5
Summercloud Creek	Pathway	0021_SW057	21 Oct 2025	Clear, tannin brown coloured, no odour or sheen, some pale foam accumulation surface, non-turbid	5.47	190.7	4.5	45.9	-35.9	16.7	147.55
Summercloud Creek	Pathway	0021_SW058	21 Oct 2025	Clear, slight yellow tinge, no odour or sheen	4.39	200.8	4.66	47	-31.9	16	157.3
Summercloud Creek	Receptor	0021_SW056	21 Oct 2025	Clear, tannin brown, no odour or sheen, non-turbid	7.52	39,766	4.15	53.9	91.9	19.8	28,645.5
Summercloud Creek	Receptor	0021_SW188	21 Oct 2025	Clear, no odour or sheen, non-turbid. [Measured pH value is not an error]	9.67	881	5.38	57.8	-147.6	18.4	656.5
Telegraph Creek	Receptor	0021_SW068	20 Oct 2025	Clear, no odour, yellow-brown tinge, no sheen, no sediment	7.48	40,726	4.2	55.2	-132.7	21	28,704



	PFAS			PFAS - Sums			PFAS - Perfluoroalkyl Sulfonic Acids				PFAS - Perfluoroalkyl Carboxylic Acids							
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	PFAS (Sum of Total)(WA DER List)	Sum of PFHxS and PFOS	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	
	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	0.02	0.02	0.02	0.02	0.1	0.02	0.02	0.02	0.02	0.02	0.02	
0020_0021_Human health consumption of biota						0.01												
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13		220															

Catchment	SPR	Location	Field ID	Date	Lab Report No.															
Bherwerre Barrier	Receptor	0021_SW212	0021_SW212_251021	21 Oct 2025	ES2533538	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02

Statistics																			
Number of Results	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *																			
Geometric Average *	0.005	0.005	0.005	0.005	0.005	0.005	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
Median Concentration *	0.005	0.005	0.005	0.005	0.005	0.005	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
Standard Deviation *																			
Geometric Standard Deviation *																			
95% UCL (Student's-t) *																			
Number of Env Standard Exceedances	0	0	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	0	0
% of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Non-Detects	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	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	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	100	100

* A Non Detect Multiplier of 0.5 has been applied.



					PFAS - Perfluoroalkyl Sulfonamide								PFAS - Fluorotelomer Sulfonic Acids			
	Perfluorooctane sulfonic acid (PFOS)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTTrDA)	Perfluoroundecanoic acid (PFUnDA)	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	
EQL	0.01	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	
0020_0021_Human health consumption of biota																
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13															

Catchment	SPR	Location	Field ID	Date	Lab Report No.														
Bherwerre Barrier	Receptor	0021_SW212	0021_SW212_251021	21 Oct 2025	ES2533538	<0.01	<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

Statistics																
Number of Results	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	<0.01	<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	<0.05
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.01	<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	<0.05
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *																
Geometric Average *	0.005	0.025	0.01	0.01	0.025	0.01	0.025	0.025	0.01	0.025	0.01	0.025	0.025	0.025	0.025	0.025
Median Concentration *	0.005	0.025	0.01	0.01	0.025	0.01	0.025	0.025	0.01	0.025	0.01	0.025	0.025	0.025	0.025	0.025
Standard Deviation *																
Geometric Standard Deviation *																
95% UCL (Student's-t) *																
Number of Env Standard Exceedances	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
% of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Non-Detects	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
% of Detects at or above Env Standards	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

* A Non Detect Multiplier of 0.5 has been applied.



Appendix B
Table B3b
October 2025 OMP Water Analytical Results - Captains Lagoon

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS			PFAS - Sums			PFAS - Perfluoroalkyl Sulfonic Acids					
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)
EQL	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13		220									
PFAS NEMP 3.0 2025 Recreational water quality	2	2	10		2							

Catchment	SPR	Location	Field ID	Date	Lab Report No.												
Captains Lagoon	Source	0020_MW052	0020_MW052_251020	20 Oct 2025	ES2533546	<0.01	0.02	<0.01	0.02	0.02	0.02	<0.02	<0.02	-	<0.02	-	<0.02
Captains Lagoon	Source	0021_MW028	0021_MW028_251021	21 Oct 2025	ES2533521	0.03	0.04	<0.01	0.07	0.07	0.07	<0.02	<0.02	-	<0.02	-	<0.02
Captains Lagoon	Source	0021_MW028	0021_QC123_251021	21 Oct 2025	ES2533538	0.04	0.04	<0.01	0.10	0.08	0.10	<0.02	<0.02	-	<0.02	-	<0.02
Captains Lagoon	Source	0021_MW028	0021_QC223_251021	21 Oct 2025	1285374	0.07 ^{#1}	0.04 ^{#1}	<0.01	0.1	0.11	0.12	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Captains Lagoon	Source	0021_MW030	0021_MW030_251022	22 Oct 2025	ES2533521	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	-	<0.02	-	<0.02
Captains Lagoon	Source	0021_MW062	0021_MW062_251022	22 Oct 2025	ES2533521	38.9	11.0	0.88	57.1	49.9	54.8	0.40	0.08	-	0.93	-	0.71
Captains Lagoon	Source	0021_MW102	0021_MW102_251022	22 Oct 2025	ES2533521	7.98	5.70	0.36	17.6	13.7	16.3	0.47	<0.02	-	0.50	-	0.63
Captains Lagoon	Source	0021_MW109	0021_MW109_251022	22 Oct 2025	ES2533521	0.64	0.64	0.02	1.54	1.28	1.48	0.03	<0.02	-	<0.02	-	0.06
Captains Lagoon	Source	0021_MW119	0021_MW119_251021	21 Oct 2025	ES2533521	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	-	<0.02	-	<0.02
Captains Lagoon	Source	0021_MW120	0021_MW120_251021	21 Oct 2025	ES2533521	0.26	0.52	0.01	1.02	0.78	0.92	0.06	<0.02	-	<0.02	-	0.08
Captains Lagoon	Source	0021_MW121	0021_MW121_251022	22 Oct 2025	ES2533521	0.03	0.48	<0.01	0.61	0.51	0.57	0.03	<0.02	-	<0.02	-	0.04
Captains Lagoon	Source	0021_MW123	0021_MW123_251021	21 Oct 2025	ES2533521	0.89	0.73	0.07	2.08	1.62	1.87	0.04	<0.02	-	0.11	-	0.10
Captains Lagoon	Source	0021_MW127	0021_MW127_251022	22 Oct 2025	ES2533521	0.22	0.40	0.02	0.83	0.62	0.77	0.05	<0.02	-	<0.02	-	0.06
Captains Lagoon	Pathway	0020_MW012A	0020_MW012A_251020	20 Oct 2025	ES2533546	3.27	0.94	0.06	4.62	4.21	4.49	0.03	<0.02	-	0.08	-	0.05
Captains Lagoon	Pathway	0020_MW055	0020_MW055_251020	20 Oct 2025	ES2533546	0.04	0.06	<0.01	0.10	0.10	0.10	<0.02	<0.02	-	<0.02	-	<0.02
Captains Lagoon	Pathway	0020_MW055	0020_QC122_251020	20 Oct 2025	ES2533546	0.05	0.05	<0.01	0.10	0.10	0.10	<0.02	<0.02	-	<0.02	-	<0.02
Captains Lagoon	Pathway	0020_MW055	0020_QC222_251020	20 Oct 2025	1285219	0.05 ^{#1}	0.06 ^{#1}	<0.01	0.1	0.11	0.11	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Captains Lagoon	Pathway	0020_MW056	0020_MW056_251020	20 Oct 2025	ES2533546	0.82	0.09	0.02	0.97	0.91	0.97	<0.02	<0.02	-	<0.02	-	<0.02
Captains Lagoon	Pathway	0020_MW057	0020_MW057_251020	20 Oct 2025	ES2533546	0.56	0.19	0.01	0.80	0.75	0.80	<0.02	<0.02	-	<0.02	-	<0.02
Captains Lagoon	Pathway	0020_MW058	0020_MW058_251020	20 Oct 2025	ES2533546	1.06	0.17	0.02	1.27	1.23	1.27	<0.02	<0.02	-	<0.02	-	<0.02
Captains Lagoon	Pathway	0020_MW059	0020_MW059_251020	20 Oct 2025	ES2533546	0.67	0.40	0.02	1.15	1.07	1.13	<0.02	<0.02	-	0.02	-	<0.02
Captains Lagoon	Pathway	0020_MW070	0020_MW070_251020	20 Oct 2025	ES2533546	0.34	0.08	<0.01	0.44	0.42	0.44	<0.02	<0.02	-	<0.02	-	<0.02
Captains Lagoon	Pathway	0020_MW070	0020_QC121_251020	20 Oct 2025	ES2533546	0.41	0.08	<0.01	0.51	0.49	0.51	<0.02	<0.02	-	<0.02	-	<0.02
Captains Lagoon	Pathway	0020_MW070	0020_QC221_251020	20 Oct 2025	1285219	0.43 ^{#1}	0.07 ^{#1}	<0.01	0.5	0.5	0.52	<0.01	<0.01	<0.01	0.02 ^{#1}	<0.01	<0.01
Captains Lagoon	Pathway	0020_MW071	0020_MW071_251020	20 Oct 2025	ES2533546	<0.01	0.02	<0.01	0.02	0.02	0.02	<0.02	<0.02	-	<0.02	-	<0.02
Captains Lagoon	Pathway	0020_MW102D	0020_MW102D_251020	20 Oct 2025	ES2533546	0.12	0.16	<0.01	0.34	0.28	0.32	0.02	<0.02	-	<0.02	-	0.02
Captains Lagoon	Pathway	0020_MW102S	0020_MW102S_251020	20 Oct 2025	ES2533546	0.12	0.08	<0.01	0.20	0.20	0.20	<0.02	<0.02	-	<0.02	-	<0.02
Captains Lagoon	Pathway	0020_MW104	0020_MW104_251020	20 Oct 2025	ES2533546	0.01	0.01	<0.01	0.02	0.02	0.02	<0.02	<0.02	-	<0.02	-	<0.02
Captains Lagoon	Pathway	0020_SW011	0020_SW011_251020	20 Oct 2025	ES2533546	0.04	0.06	<0.01	0.10	0.10	0.10	<0.02	<0.02	-	<0.02	-	<0.02
Captains Lagoon	Pathway	0020_SW057	0020_QC160_251020	20 Oct 2025	ES2533546	0.82	0.17	<0.01	0.99	0.99	0.99	<0.02	<0.02	-	<0.02	-	<0.02
Captains Lagoon	Pathway	0020_SW057	0020_QC260_251020	20 Oct 2025	1285219	1.0 ^{#1}	0.17 ^{#1}	<0.01	1.2	1.17	1.17	<0.01	<0.01	0.04	0.02 ^{#1}	<0.01	<0.01
Captains Lagoon	Pathway	0020_SW057	0020_SW057_251020	20 Oct 2025	ES2533546	0.95	0.20	0.01	1.16	1.15	1.16	<0.02	<0.02	-	<0.02	-	<0.02
Captains Lagoon	Pathway	0021_MW018	0021_MW018_251021	21 Oct 2025	ES2533521	0.03	0.11	<0.01	0.16	0.14	0.16	<0.02	<0.02	-	<0.02	-	<0.02
Captains Lagoon	Pathway	0021_MW108	0021_MW108_251023	23 Oct 2025	ES2533521	3.80	2.91	0.12	7.92	6.71	7.55	0.15	<0.02	-	0.12	-	0.22
Captains Lagoon	Pathway	0021_MW108	0021_QC166_251023	23 Oct 2025	ES2533538	4.05	3.21	0.12	8.49	7.26	8.11	0.15	<0.02	-	0.12	-	0.22
Captains Lagoon	Pathway	0021_MW108	0021_QC266_251023	23 Oct 2025	1285374	4.7 ^{#1}	2.9 ^{#1}	0.12 ^{#1}	8.8	7.6	8.42	0.14	<0.01	0.02	0.12 ^{#1}	0.03	0.17 ^{#1}
Captains Lagoon	Pathway	0021_MW124	0021_MW124_251023	23 Oct 2025	ES2533521	0.38	0.17	0.01	0.58	0.55	0.58	<0.02	<0.02	-	<0.02	-	<0.02
Captains Lagoon	Pathway	0021_MW134	0021_MW134_251022	22 Oct 2025	ES2533521	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	-	<0.02	-	<0.02
Captains Lagoon	Receptor	0020_SW004	0020_SW004_251020	20 Oct 2025	ES2533546	0.08	0.05	<0.01	0.13	0.13	0.13	<0.02	<0.02	-	<0.02	-	<0.02
Captains Lagoon	Receptor	0020_SW005	0020_SW005_251020	20 Oct 2025	ES2533546	0.08	0.05	<0.01	0.13	0.13	0.13	<0.02	<0.02	-	<0.02	-	<0.02
Captains Lagoon	Receptor	0020_SW010	0020_SW010_251020	20 Oct 2025	ES2533546	0.09	0.04	<0.01	0.13	0.13	0.13	<0.02	<0.02	-	<0.02	-	<0.02
Captains Lagoon	Receptor	0020_SW012	0020_SW012_251020	20 Oct 2025	ES2533546	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	-	<0.02	-	<0.02



	PFAS			PFAS - Sums			PFAS - Perfluoroalkyl Sulfonic Acids					
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluorohexptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)
EQL	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13		220									
PFAS NEMP 3.0 2025 Recreational water quality	2	2	10		2							

Statistics

Number of Results	42	42	42	42	42	42	42	42	5	42	5	42
Number of Detects	36	38	16	38	38	38	12	1	2	10	1	12
Minimum Concentration	0.01	0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Minimum Detect	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.08	0.02	0.02	0.03	0.02
Maximum Concentration	38.9	11	0.88	57.1	49.9	54.8	0.47	0.08	0.04	0.93	0.03	0.71
Maximum Detect	38.9	11	0.88	57.1	49.9	54.8	0.47	0.08	0.04	0.93	0.03	0.71
Average Concentration *	1.7	0.76	0.048	2.9	2.5	2.8	0.044	0.011	0.015	0.056	0.01	0.063
Geometric Average *	0.17	0.12	0.011	0.33	0.3	0.32	0.017	0.0097	0.01	0.017	0.0072	0.019
Median Concentration *	0.17	0.085	0.005	0.47	0.455	0.475	0.01	0.01	0.005	0.01	0.005	0.01
Standard Deviation *	6.1	2	0.15	9.2	8	8.8	0.096	0.011	0.015	0.16	0.011	0.15
Geometric Standard Deviation *	9.7	6.7	3.8	9.5	9	9.3	3.1	1.5	2.7	3.2	2.2	3.7
95% UCL (Student's-t) *	3.321	1.276	0.0853	5.293	4.573	5.063	0.069	0.0139	0.0297	0.0975	0.0207	0.101
Number of Env Standard Exceedances	21	5	0	0	6	0	0	0	0	0	0	0
Number of Env Standard Exceedances (Detects Only)	21	5	0	0	6	0	0	0	0	0	0	0
% of Detects	86	90	38	90	90	90	29	2	40	24	20	29
% of Non-Detects	14	10	62	10	10	10	71	98	60	76	80	71
% of Detects at or above Env Standards	50	12	0	0	14	0	0	0	0	0	0	0
% of Results Below Env Standards or Non-Detect	50	88	100	100	86	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.



	PFAS - Perfluoroalkyl Carboxylic Acids										
	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluorooheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTriDA)	Perfluoroundecanoic acid (PFUnDA)	N-Ethyl perfluorooctane sulfonamide (EtFOsa)
EQL	0.05	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.05
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%											
PFAS NEMP 3.0 2025 Recreational water quality											

Catchment	SPR	Location	Field ID	Date	Lab Report No.											
Captains Lagoon	Source	0020_MW052	0020_MW052_251020	20 Oct 2025	ES2533546	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Captains Lagoon	Source	0021_MW028	0021_MW028_251021	21 Oct 2025	ES2533521	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Captains Lagoon	Source	0021_MW028	0021_QC123_251021	21 Oct 2025	ES2533538	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Captains Lagoon	Source	0021_MW028	0021_QC223_251021	21 Oct 2025	1285374	<0.05	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05
Captains Lagoon	Source	0021_MW030	0021_MW030_251022	22 Oct 2025	ES2533521	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Captains Lagoon	Source	0021_MW062	0021_MW062_251022	22 Oct 2025	ES2533521	0.2	0.04	<0.02	0.50	2.49	0.06	0.38	<0.05	<0.02	<0.02	<0.05
Captains Lagoon	Source	0021_MW102	0021_MW102_251022	22 Oct 2025	ES2533521	0.1	<0.02	<0.02	0.20	1.28	<0.02	0.20	<0.05	<0.02	<0.02	<0.05
Captains Lagoon	Source	0021_MW109	0021_MW109_251022	22 Oct 2025	ES2533521	<0.1	<0.02	<0.02	<0.02	0.15	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Captains Lagoon	Source	0021_MW119	0021_MW119_251021	21 Oct 2025	ES2533521	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Captains Lagoon	Source	0021_MW120	0021_MW120_251021	21 Oct 2025	ES2533521	<0.1	<0.02	<0.02	<0.02	0.07	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Captains Lagoon	Source	0021_MW121	0021_MW121_251022	22 Oct 2025	ES2533521	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Captains Lagoon	Source	0021_MW123	0021_MW123_251021	21 Oct 2025	ES2533521	<0.1	<0.02	<0.02	0.02	0.10	<0.02	0.02	<0.05	<0.02	<0.02	<0.05
Captains Lagoon	Source	0021_MW127	0021_MW127_251022	22 Oct 2025	ES2533521	<0.1	<0.02	<0.02	<0.02	0.08	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Captains Lagoon	Pathway	0020_MW012A	0020_MW012A_251020	20 Oct 2025	ES2533546	<0.1	<0.02	<0.02	0.02	0.14	<0.02	0.03	<0.05	<0.02	<0.02	<0.05
Captains Lagoon	Pathway	0020_MW055	0020_MW055_251020	20 Oct 2025	ES2533546	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Captains Lagoon	Pathway	0020_MW055	0020_QC122_251020	20 Oct 2025	ES2533546	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Captains Lagoon	Pathway	0020_MW055	0020_QC222_251020	20 Oct 2025	1285219	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05
Captains Lagoon	Pathway	0020_MW056	0020_MW056_251020	20 Oct 2025	ES2533546	<0.1	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Captains Lagoon	Pathway	0020_MW057	0020_MW057_251020	20 Oct 2025	ES2533546	<0.1	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Captains Lagoon	Pathway	0020_MW058	0020_MW058_251020	20 Oct 2025	ES2533546	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Captains Lagoon	Pathway	0020_MW059	0020_MW059_251020	20 Oct 2025	ES2533546	<0.1	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Captains Lagoon	Pathway	0020_MW070	0020_MW070_251020	20 Oct 2025	ES2533546	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Captains Lagoon	Pathway	0020_MW070	0020_QC121_251020	20 Oct 2025	ES2533546	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Captains Lagoon	Pathway	0020_MW070	0020_QC221_251020	20 Oct 2025	1285219	<0.05	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05
Captains Lagoon	Pathway	0020_MW071	0020_MW071_251020	20 Oct 2025	ES2533546	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Captains Lagoon	Pathway	0020_MW102D	0020_MW102D_251020	20 Oct 2025	ES2533546	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Captains Lagoon	Pathway	0020_MW102S	0020_MW102S_251020	20 Oct 2025	ES2533546	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Captains Lagoon	Pathway	0020_MW104	0020_MW104_251020	20 Oct 2025	ES2533546	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Captains Lagoon	Pathway	0020_SW011	0020_SW011_251020	20 Oct 2025	ES2533546	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Captains Lagoon	Pathway	0020_SW057	0020_QC160_251020	20 Oct 2025	ES2533546	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Captains Lagoon	Pathway	0020_SW057	0020_QC260_251020	20 Oct 2025	1285219	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05
Captains Lagoon	Pathway	0020_SW057	0020_SW057_251020	20 Oct 2025	ES2533546	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Captains Lagoon	Pathway	0021_MW018	0021_MW018_251021	21 Oct 2025	ES2533521	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Captains Lagoon	Pathway	0021_MW108	0021_MW108_251023	23 Oct 2025	ES2533521	<0.1	<0.02	<0.02	0.06	0.43	<0.02	0.08	<0.05	<0.02	<0.02	<0.05
Captains Lagoon	Pathway	0021_MW108	0021_QC166_251023	23 Oct 2025	ES2533538	<0.1	<0.02	<0.02	0.05	0.43	<0.02	0.10	<0.05	<0.02	<0.02	<0.05
Captains Lagoon	Pathway	0021_MW108	0021_QC266_251023	23 Oct 2025	1285374	<0.05	<0.01	<0.01	0.07 ^{#1}	0.40	<0.01	0.09	<0.01	<0.01	<0.01	<0.05
Captains Lagoon	Pathway	0021_MW124	0021_MW124_251023	23 Oct 2025	ES2533521	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Captains Lagoon	Pathway	0021_MW134	0021_MW134_251022	22 Oct 2025	ES2533521	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Captains Lagoon	Receptor	0020_SW004	0020_SW004_251020	20 Oct 2025	ES2533546	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Captains Lagoon	Receptor	0020_SW005	0020_SW005_251020	20 Oct 2025	ES2533546	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Captains Lagoon	Receptor	0020_SW010	0020_SW010_251020	20 Oct 2025	ES2533546	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Captains Lagoon	Receptor	0020_SW012	0020_SW012_251020	20 Oct 2025	ES2533546	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05



	PFAS - Perfluoroalkyl Carboxylic Acids										
	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluorooheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTriDA)	Perfluoroundecanoic acid (PFUnDA)	N-Ethyl perfluorooctane sulfonamide (EtFOA)
EQL	0.05	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.05
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%											
PFAS NEMP 3.0 2025 Recreational water quality											

Statistics

Number of Results	42	42	42	42	42	42	42	42	42	42	42
Number of Detects	2	1	0	7	23	1	7	0	0	0	0
Minimum Concentration	<0.05	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05
Minimum Detect	0.1	0.04	ND	0.02	0.01	0.06	0.02	ND	ND	ND	ND
Maximum Concentration	0.2	0.04	<0.02	0.5	2.49	0.06	0.38	<0.05	<0.02	<0.02	<0.05
Maximum Detect	0.2	0.04	ND	0.5	2.49	0.06	0.38	ND	ND	ND	ND
Average Concentration *	0.052	0.01	0.0094	0.03	0.14	0.011	0.029	0.023	0.0094	0.0094	0.025
Geometric Average *	0.048	0.0095	0.0092	0.013	0.028	0.0096	0.013	0.021	0.0092	0.0092	0.025
Median Concentration *	0.05	0.01	0.01	0.01	0.02	0.01	0.01	0.025	0.01	0.01	0.025
Standard Deviation *	0.026	0.005	0.0016	0.081	0.43	0.008	0.066	0.0066	0.0016	0.0016	0
Geometric Standard Deviation *	1.4	1.4	1.3	2.5	4.5	1.4	2.6	1.7	1.3	1.3	1
95% UCL (Student's-t) *	0.0586	0.0114	0.00983	0.0507	0.256	0.0127	0.0464	0.0243	0.00983	0.00983	0.025
Number of Env Standard Exceedances	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
% of Detects	5	2	0	17	55	2	17	0	0	0	0
% of Non-Detects	95	98	100	83	45	98	83	100	100	100	100
% of Detects at or above Env Standards	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

* 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.



	PFAS - Perfluoroalkyl Sulfonamide						PFAS - Fluorotelomer Sulfonic Acids			
	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA) µg/L	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE) µg/L	N-Methyl perfluorooctane sulfonamide (MeFOSA) µg/L	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA) µg/L	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE) µg/L	Perfluorooctane sulfonamide (PFOSA) µg/L	4:2 Fluorotelomer sulfonic acid (4:2 FTS) µg/L	6:2 Fluorotelomer Sulfonate (6:2 FTS) µg/L	8:2 Fluorotelomer sulfonic acid (8:2 FTS) µg/L	10:2 Fluorotelomer sulfonic acid (10:2 FTS) µg/L
EQL	0.02	0.05	0.05	0.02	0.05	0.02	0.01	0.05	0.01	0.01
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%										
PFAS NEMP 3.0 2025 Recreational water quality										

Catchment	SPR	Location	Field ID	Date	Lab Report No.										
Captains Lagoon	Source	0020_MW052	0020_MW052_251020	20 Oct 2025	ES2533546	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW028	0021_MW028_251021	21 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW028	0021_QC123_251021	21 Oct 2025	ES2533538	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW028	0021_QC223_251021	21 Oct 2025	1285374	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Captains Lagoon	Source	0021_MW030	0021_MW030_251022	22 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW062	0021_MW062_251022	22 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW102	0021_MW102_251022	22 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW109	0021_MW109_251022	22 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW119	0021_MW119_251021	21 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW120	0021_MW120_251021	21 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW121	0021_MW121_251022	22 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW123	0021_MW123_251021	21 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW127	0021_MW127_251022	22 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW012A	0020_MW012A_251020	20 Oct 2025	ES2533546	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW055	0020_MW055_251020	20 Oct 2025	ES2533546	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW055	0020_QC122_251020	20 Oct 2025	ES2533546	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW055	0020_QC222_251020	20 Oct 2025	1285219	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Captains Lagoon	Pathway	0020_MW056	0020_MW056_251020	20 Oct 2025	ES2533546	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW057	0020_MW057_251020	20 Oct 2025	ES2533546	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW058	0020_MW058_251020	20 Oct 2025	ES2533546	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW059	0020_MW059_251020	20 Oct 2025	ES2533546	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW070	0020_MW070_251020	20 Oct 2025	ES2533546	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW070	0020_QC121_251020	20 Oct 2025	ES2533546	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW070	0020_QC221_251020	20 Oct 2025	1285219	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Captains Lagoon	Pathway	0020_MW071	0020_MW071_251020	20 Oct 2025	ES2533546	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW102D	0020_MW102D_251020	20 Oct 2025	ES2533546	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW102S	0020_MW102S_251020	20 Oct 2025	ES2533546	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW104	0020_MW104_251020	20 Oct 2025	ES2533546	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_SW011	0020_SW011_251020	20 Oct 2025	ES2533546	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_SW057	0020_QC160_251020	20 Oct 2025	ES2533546	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_SW057	0020_QC260_251020	20 Oct 2025	1285219	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Captains Lagoon	Pathway	0020_SW057	0020_SW057_251020	20 Oct 2025	ES2533546	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_MW018	0021_MW018_251021	21 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_MW108	0021_MW108_251023	23 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_MW108	0021_QC166_251023	23 Oct 2025	ES2533538	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_MW108	0021_QC266_251023	23 Oct 2025	1285374	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Captains Lagoon	Pathway	0021_MW124	0021_MW124_251023	23 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_MW134	0021_MW134_251022	22 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW004	0020_SW004_251020	20 Oct 2025	ES2533546	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW005	0020_SW005_251020	20 Oct 2025	ES2533546	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW010	0020_SW010_251020	20 Oct 2025	ES2533546	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW012	0020_SW012_251020	20 Oct 2025	ES2533546	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05



	PFAS - Perfluoroalkyl Sulfonamide						PFAS - Fluorotelomer Sulfonic Acids			
	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)
EQL	µg/L 0.02	µg/L 0.05	µg/L 0.05	µg/L 0.02	µg/L 0.05	µg/L 0.02	µg/L 0.01	µg/L 0.05	µg/L 0.01	µg/L 0.01
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%										
PFAS NEMP 3.0 2025 Recreational water quality										

Statistics

Number of Results	42	42	42	42	42	42	42	42	42	42
Number of Detects	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.01	<0.05	<0.01	<0.01
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *	0.012	0.025	0.025	0.012	0.025	0.012	0.023	0.025	0.023	0.023
Geometric Average *	0.011	0.025	0.025	0.011	0.025	0.011	0.021	0.025	0.021	0.021
Median Concentration *	0.01	0.025	0.025	0.01	0.025	0.01	0.025	0.025	0.025	0.025
Standard Deviation *	0.0049	0	0	0.0049	0	0.0049	0.0066	0	0.0066	0.0066
Geometric Standard Deviation *	1.4	1	1	1.4	1	1.4	1.7	1	1.7	1.7
95% UCL (Student's-t) *	0.0131	0.025	0.025	0.0131	0.025	0.0131	0.0243	0.025	0.0243	0.0243
Number of Env Standard Exceedances	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
% of Detects	0	0	0	0	0	0	0	0	0	0
% of Non-Detects	100	100	100	100	100	100	100	100	100	100
% of Detects at or above Env Standards	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

* 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.



	PFAS			PFAS - Sums			PFAS - Perfluoroalkyl Sulfonic Acids				PFAS - Perfluoroalkyl Carboxylic Acids							
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	PFAS (Sum of Total)(WA DER List)	Sum of PFHxS and PFOS	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	
	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	0.02	0.02	0.02	0.02	0.1	0.02	0.02	0.02	0.02	0.02	0.02	
0020_0021_Human health consumption of biota						0.01												
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13		220															
PFAS NEMP 3.0 2025 Recreational water quality	2	2	10			2												

Catchment	SPR	Location	Field ID	Date	Lab Report No.																	
Clay Pools	Receptor	0021_MW020	0021_MW020_251021	21 Oct 2025	ES2533521	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Clay Pools	Receptor	0021_SW076	0021_SW076_251023	23 Oct 2025	ES2533538	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Clay Pools	Receptor	0021_SW077	0021_SW077_251023	23 Oct 2025	ES2533538	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Clay Pools	Receptor	0021_SW078	0021_SW078_251023	23 Oct 2025	ES2533538	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Clay Pools	Receptor	0021_SW079	0021_SW079_251023	23 Oct 2025	ES2533538	0.06	0.03	<0.01	0.09	0.09	0.09	<0.02	<0.02	<0.02	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Clay Pools	Receptor	0021_SW080	0021_SW080_251023	23 Oct 2025	ES2533538	0.03	0.01	<0.01	0.04	0.04	0.04	<0.02	<0.02	<0.02	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02

Statistics																			
Number of Results						6	6	6	6	6	6	6	6	6	6	6	6	6	6
Number of Detects						2	2	0	2	2	2	0	0	0	0	0	0	0	0
Minimum Concentration						<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.1	<0.02	<0.02	<0.02
Minimum Detect						0.03	0.01	ND	0.04	0.04	0.04	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration						0.06	0.03	<0.01	0.09	0.09	0.09	<0.02	<0.02	<0.02	<0.02	<0.1	<0.02	<0.02	<0.02
Maximum Detect						0.06	0.03	ND	0.09	0.09	0.09	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *						0.018	0.01	0.005	0.025	0.025	0.025	0.01	0.01	0.01	0.01	0.05	0.01	0.01	0.01
Geometric Average *						0.01	0.0076	0.005	0.011	0.011	0.011	0.01	0.01	0.01	0.01	0.05	0.01	0.01	0.01
Median Concentration *						0.005	0.005	0.005	0.005	0.005	0.005	0.01	0.01	0.01	0.01	0.05	0.01	0.01	0.01
Standard Deviation *						0.023	0.01	0	0.035	0.035	0.035	0	0	0	0	0	0	0	0
Geometric Standard Deviation *						3.1	2.1	1	3.7	3.7	3.7	1	1	1	1	1	1	1	1
95% UCL (Student's-t) *						0.037	0.0182	0.005	0.0536	0.0536	0.0536	0.01	0.01	0.01	0.01	0.05	0.01	0.01	0.01
Number of Env Standard Exceedances						2	2	0	0	0	2	0	0	0	0	0	0	0	0
Number of Env Standard Exceedances (Detects Only)						2	2	0	0	0	2	0	0	0	0	0	0	0	0
% of Detects						33	33	0	33	33	33	0	0	0	0	0	0	0	0
% of Non-Detects						67	67	100	67	67	67	100	100	100	100	100	100	100	100
% of Detects at or above Env Standards						33	33	0	0	0	33	0	0	0	0	0	0	0	0
% of Results Below Env Standards or Non-Detect						67	67	100	100	100	67	100	100	100	100	100	100	100	100

* A Non Detect Multiplier of 0.5 has been applied.



				PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTTrDA)	Perfluoroundecanoic acid (PFUnDA)	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
EQL	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
0020_0021_Human health consumption of biota														
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%														
PFAS NEMP 3.0 2025 Recreational water quality														

Catchment	SPR	Location	Field ID	Date	Lab Report No.													
Clay Pools	Receptor	0021_MW020	0021_MW020_251021	21 Oct 2025	ES2533521	<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
Clay Pools	Receptor	0021_SW076	0021_SW076_251023	23 Oct 2025	ES2533538	<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
Clay Pools	Receptor	0021_SW077	0021_SW077_251023	23 Oct 2025	ES2533538	<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
Clay Pools	Receptor	0021_SW078	0021_SW078_251023	23 Oct 2025	ES2533538	<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
Clay Pools	Receptor	0021_SW079	0021_SW079_251023	23 Oct 2025	ES2533538	<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
Clay Pools	Receptor	0021_SW080	0021_SW080_251023	23 Oct 2025	ES2533538	<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

Statistics															
Number of Results	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	<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	<0.05
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<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	<0.05
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *	0.025	0.01	0.01	0.025	0.01	0.025	0.025	0.01	0.025	0.01	0.025	0.025	0.025	0.025	0.025
Geometric Average *	0.025	0.01	0.01	0.025	0.01	0.025	0.025	0.01	0.025	0.01	0.025	0.025	0.025	0.025	0.025
Median Concentration *	0.025	0.01	0.01	0.025	0.01	0.025	0.025	0.01	0.025	0.01	0.025	0.025	0.025	0.025	0.025
Standard Deviation *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Geometric Standard Deviation *	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
95% UCL (Student's-t) *	0.025	0.01	0.01	0.025	0.01	0.025	0.025	0.01	0.025	0.01	0.025	0.025	0.025	0.025	0.025
Number of Env Standard Exceedances	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
% of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Non-Detects	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
% of Detects at or above Env Standards	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

* A Non Detect Multiplier of 0.5 has been applied.



Appendix B
Table B3d
October 2025 OMP Water Analytical Results - Flatrock Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS			PFAS - Sums			PFAS - Perfluoroalkyl Sulfonic Acids					
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)
EQL	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13		220									
PFAS NEMP 3.0 2025 Recreational water quality	2	2	10		2							

Catchment	SPR	Location	Field ID	Date	Lab Report No.												
Flatrock Creek	Pathway	0020_MW001	0020_MW001_251023	23 Oct 2025	ES2533546	<0.01	0.02	<0.01	0.02	0.02	0.02	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0020_MW007	0020_MW007_251023	23 Oct 2025	ES2533546	0.10	0.08	<0.01	0.18	0.18	0.18	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0020_MW007	0020_QC105_251023	23 Oct 2025	ES2533546	0.16	0.08	<0.01	0.24	0.24	0.24	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0020_MW007	0020_QC205_251023	23 Oct 2025	1285219	0.11 ^{#1}	0.08 ^{#1}	<0.01	0.2	0.19	0.19	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Flatrock Creek	Pathway	0020_MW017	0020_MW017_251020	20 Oct 2025	ES2533546	0.48	0.28	0.02	0.87	0.76	0.83	<0.02	<0.02	-	0.02	-	0.02
Flatrock Creek	Source	0020_MW037	0020_MW037_251020	20 Oct 2025	ES2533546	2.62	8.31	0.73	29.1	10.9	26.8	1.19	<0.02	-	0.53	-	1.24
Flatrock Creek	Pathway	0020_MW068	0020_MW068_251020	20 Oct 2025	ES2533546	<0.01	0.09	<0.01	0.09	0.09	0.09	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0020_MW069	0020_MW069_251020	20 Oct 2025	ES2533546	0.01	0.01	<0.01	0.02	0.02	0.02	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0020_MW109	0020_MW109_251020	20 Oct 2025	ES2533546	0.66	0.28	0.02	1.04	0.94	1.02	<0.02	<0.02	-	0.02	-	<0.02
Flatrock Creek	Pathway	0020_MW109	0020_QC140_251020	20 Oct 2025	ES2533546	0.80	0.29	0.02	1.19	1.09	1.17	<0.02	<0.02	-	0.02	-	<0.02
Flatrock Creek	Pathway	0020_MW109	0020_QC240_251020	20 Oct 2025	1285219	0.92 ^{#1}	0.27 ^{#1}	0.02 ^{#1}	1.4	1.19	1.3	0.01	<0.01	<0.01	0.04 ^{#1}	<0.01	0.01 ^{#1}
Flatrock Creek	Pathway	0020_MW110	0020_MW110_251020	20 Oct 2025	ES2533546	4.20	0.59	0.07	6.01	4.79	5.90	<0.02	<0.02	-	0.09	-	0.02
Flatrock Creek	Source	0020_MW112	0020_MW112_251020	20 Oct 2025	ES2533546	0.12	1.09	0.10	2.11	1.21	1.96	0.13	<0.02	-	<0.02	-	0.12
Flatrock Creek	Source	0020_SW016	0020_SW016_251020	20 Oct 2025	ES2533546	0.29	0.20	0.02	0.58	0.49	0.58	0.03	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Receptor	0020_SW026	0020_QC120_251020	20 Oct 2025	ES2533546	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Receptor	0020_SW026	0020_QC220_251020	20 Oct 2025	1285219	0.01 ^{#1}	<0.01	<0.01	<0.1	0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Flatrock Creek	Receptor	0020_SW026	0020_SW026_251020	20 Oct 2025	ES2533546	0.01	<0.01	<0.01	0.01	0.01	0.01	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Receptor	0020_SW027	0020_SW027_251020	20 Oct 2025	ES2533546	0.02	0.02	<0.01	0.04	0.04	0.04	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Receptor	0020_SW029	0020_SW029_251020	20 Oct 2025	ES2533546	0.03	0.03	<0.01	0.06	0.06	0.06	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0020_SW030	0020_SW030_251022	22 Oct 2025	ES2533546	0.04	0.04	<0.01	0.08	0.08	0.08	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Receptor	0020_SW033	0020_SW033_251020	20 Oct 2025	ES2533546	0.01	<0.01	<0.01	0.01	0.01	0.01	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0020_SW054	0020_SW054_251020	20 Oct 2025	ES2533546	0.54	0.12	0.02	0.74	0.66	0.71	<0.02	<0.02	-	0.03	-	<0.02
Flatrock Creek	Source	0021_MW026	0021_MW026_251021	21 Oct 2025	ES2533521	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Source	0021_MW117	0021_MW117_251021	21 Oct 2025	ES2533521	0.04	0.10	<0.01	0.14	0.14	0.14	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Source	0021_MW118	0021_MW118_251021	21 Oct 2025	ES2533521	0.44	0.50	<0.01	1.00	0.94	0.96	<0.02	<0.02	-	<0.02	-	0.04
Flatrock Creek	Source	0021_MW118	0021_QC140_251021	21 Oct 2025	ES2533538	0.42	0.50	0.01	0.99	0.92	0.96	<0.02	<0.02	-	<0.02	-	0.03
Flatrock Creek	Source	0021_MW118	0021_QC240_251021	21 Oct 2025	1285374	0.45 ^{#1}	0.46 ^{#1}	<0.01	1.0	0.91	0.96	0.02	<0.01	<0.01	0.01 ^{#1}	<0.01	0.03 ^{#1}
Flatrock Creek	Pathway	0021_MW125	0021_MW125_251022	22 Oct 2025	ES2533521	0.04	0.09	<0.01	0.13	0.13	0.13	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0021_MW126	0021_MW126_251022	22 Oct 2025	ES2533521	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0021_MW128	0021_MW128_251021	21 Oct 2025	ES2533521	<0.01	0.05	<0.01	0.05	0.05	0.05	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0021_MW160	0021_MW160_251021	21 Oct 2025	ES2533521	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0021_MW163	0021_MW163_251022	22 Oct 2025	ES2533521	0.59	0.09	<0.01	0.72	0.68	0.72	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0021_MW164	0021_MW164_251021	21 Oct 2025	ES2533521	2.34	0.27	<0.01	2.89	2.61	2.63	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0021_SW022	0021_SW022_251022	22 Oct 2025	ES2533521	0.28	0.44	0.02	0.87	0.72	0.84	0.03	<0.02	-	<0.02	-	0.03

Statistics													
Number of Results						34	34	34	34	34	34	34	34
Number of Detects						27	27	11	29	30	29	6	9
Minimum Concentration						0.01	0.01	0.01	0.01	0.01	0.01	0.01	<0.01
Minimum Detect						0.01	0.01	0.01	0.01	0.01	0.01	0.01	ND
Maximum Concentration						4.2	8.31	0.73	29.1	10.9	26.8	1.19	<0.02
Maximum Detect						4.2	8.31	0.73	29.1	10.9	26.8	1.19	ND
Average Concentration *						0.46	0.42	0.034	1.5	0.89	1.4	0.049	0.0094
Geometric Average *						0.081	0.076	0.0093	0.18	0.16	0.18	0.013	0.0092
Median Concentration *						0.105	0.09	0.005	0.19	0.185	0.185	0.01	0.01



	PFAS			PFAS - Sums			PFAS - Perfluoroalkyl Sulfonic Acids					
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluorooheptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)
	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	0.01	0.01	0.01
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13		220									
PFAS NEMP 3.0 2025 Recreational water quality	2	2	10		2							

Standard Deviation *	0.89	1.4	0.12	5	2	4.6	0.2	0.0016	0	0.09	0	0.21
Geometric Standard Deviation *	8.7	6.6	3.1	9.5	8.8	9.5	2.6	1.3	1	2.3	1	2.7
95% UCL (Student's-t) *	0.723	0.834	0.0704	2.978	1.465	2.771	0.108	0.00989	0.005	0.0557	0.005	0.114
Number of Env Standard Exceedances	15	1	0	0	3	0	0	0	0	0	0	0
Number of Env Standard Exceedances (Detects Only)	15	1	0	0	3	0	0	0	0	0	0	0
% of Detects	79	79	32	85	88	85	18	0	0	24	0	26
% of Non-Detects	21	21	68	15	12	15	82	100	100	76	100	74
% of Detects at or above Env Standards	44	3	0	0	9	0	0	0	0	0	0	0
% of Results Below Env Standards or Non-Detect	56	97	100	100	91	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.



	PFAS - Perfluoroalkyl Carboxylic Acids										N-Ethyl perfluorooctane sulfonamide (EtFOSA)
	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTTrDA)	Perfluoroundecanoic acid (PFUnDA)	
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
EQL	0.05	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.05
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%											
PFAS NEMP 3.0 2025 Recreational water quality											

Catchment	SPR	Location	Field ID	Date	Lab Report No.											
Flatrock Creek	Pathway	0020_MW001	0020_MW001_251023	23 Oct 2025	ES2533546	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW007	0020_MW007_251023	23 Oct 2025	ES2533546	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW007	0020_QC105_251023	23 Oct 2025	ES2533546	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW007	0020_QC205_251023	23 Oct 2025	1285219	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05
Flatrock Creek	Pathway	0020_MW017	0020_MW017_251020	20 Oct 2025	ES2533546	<0.1	<0.02	<0.02	<0.02	0.05	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0020_MW037	0020_MW037_251020	20 Oct 2025	ES2533546	0.7	<0.02	<0.02	0.51	3.42	<0.02	2.35	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW068	0020_MW068_251020	20 Oct 2025	ES2533546	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW069	0020_MW069_251020	20 Oct 2025	ES2533546	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW109	0020_MW109_251020	20 Oct 2025	ES2533546	<0.1	<0.02	<0.02	<0.02	0.06	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW109	0020_QC140_251020	20 Oct 2025	ES2533546	<0.1	<0.02	<0.02	<0.02	0.06	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW109	0020_QC240_251020	20 Oct 2025	1285219	<0.05	<0.01	<0.01	0.01 ^{#1}	0.05	<0.01	0.02	<0.01	<0.01	<0.01	<0.05
Flatrock Creek	Pathway	0020_MW110	0020_MW110_251020	20 Oct 2025	ES2533546	0.3	<0.02	<0.02	0.06	0.10	<0.02	0.58	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0020_MW112	0020_MW112_251020	20 Oct 2025	ES2533546	<0.1	<0.02	<0.02	0.07	0.33	<0.02	0.12	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0020_SW016	0020_SW016_251020	20 Oct 2025	ES2533546	<0.1	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW026	0020_QC120_251020	20 Oct 2025	ES2533546	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW026	0020_QC220_251020	20 Oct 2025	1285219	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05
Flatrock Creek	Receptor	0020_SW026	0020_SW026_251020	20 Oct 2025	ES2533546	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW027	0020_SW027_251020	20 Oct 2025	ES2533546	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW029	0020_SW029_251020	20 Oct 2025	ES2533546	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_SW030	0020_SW030_251022	22 Oct 2025	ES2533546	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW033	0020_SW033_251020	20 Oct 2025	ES2533546	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_SW054	0020_SW054_251020	20 Oct 2025	ES2533546	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0021_MW026	0021_MW026_251021	21 Oct 2025	ES2533521	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0021_MW117	0021_MW117_251021	21 Oct 2025	ES2533521	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0021_MW118	0021_MW118_251021	21 Oct 2025	ES2533521	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0021_MW118	0021_QC140_251021	21 Oct 2025	ES2533538	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0021_MW118	0021_QC240_251021	21 Oct 2025	1285374	<0.05	<0.01	<0.01	<0.01	0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05
Flatrock Creek	Pathway	0021_MW125	0021_MW125_251022	22 Oct 2025	ES2533521	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW126	0021_MW126_251022	22 Oct 2025	ES2533521	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW128	0021_MW128_251021	21 Oct 2025	ES2533521	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW160	0021_MW160_251021	21 Oct 2025	ES2533521	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW163	0021_MW163_251022	22 Oct 2025	ES2533521	<0.1	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW164	0021_MW164_251021	21 Oct 2025	ES2533521	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_SW022	0021_SW022_251022	22 Oct 2025	ES2533521	<0.1	<0.02	<0.02	<0.02	0.07	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05

Statistics											
Number of Results	34	34	34	34	34	34	34	34	34	34	34
Number of Detects	2	0	0	4	15	0	4	0	0	0	0
Minimum Concentration	<0.05	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05
Minimum Detect	0.3	ND	ND	0.01	0.02	ND	0.02	ND	ND	ND	ND
Maximum Concentration	0.7	<0.02	<0.02	0.51	3.42	<0.02	2.35	<0.05	<0.02	<0.02	<0.05
Maximum Detect	0.7	ND	ND	0.51	3.42	ND	2.35	ND	ND	ND	ND
Average Concentration *	0.074	0.0094	0.0094	0.028	0.13	0.0094	0.099	0.023	0.0094	0.0094	0.025
Geometric Average *	0.052	0.0092	0.0092	0.012	0.022	0.0092	0.014	0.021	0.0092	0.0092	0.025
Median Concentration *	0.05	0.01	0.01	0.01	0.01	0.01	0.01	0.025	0.01	0.01	0.025



	PFAS - Perfluoroalkyl Carboxylic Acids										
	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTTrDA)	Perfluoroundecanoic acid (PFUnDA)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)
	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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.05
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%											
PFAS NEMP 3.0 2025 Recreational water quality											

Standard Deviation *	0.12	0.0016	0.0016	0.086	0.58	0.0016	0.41	0.0065	0.0016	0.0016	0
Geometric Standard Deviation *	1.8	1.3	1.3	2.3	3.7	1.3	3.5	1.7	1.3	1.3	1
95% UCL (Student's-t) *	0.108	0.00989	0.00989	0.0525	0.303	0.00989	0.218	0.0245	0.00989	0.00989	0.025
Number of Env Standard Exceedances	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
% of Detects	6	0	0	12	44	0	12	0	0	0	0
% of Non-Detects	94	100	100	88	56	100	88	100	100	100	100
% of Detects at or above Env Standards	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

* 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.



	PFAS - Perfluoroalkyl Sulfonamide						PFAS - Fluorotelomer Sulfonic Acids			
	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
EQL	0.02	0.05	0.05	0.02	0.05	0.02	0.01	0.05	0.01	0.01
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%										
PFAS NEMP 3.0 2025 Recreational water quality										

Catchment	SPR	Location	Field ID	Date	Lab Report No.										
Flatrock Creek	Pathway	0020_MW001	0020_MW001_251023	23 Oct 2025	ES2533546	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW007	0020_MW007_251023	23 Oct 2025	ES2533546	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW007	0020_QC105_251023	23 Oct 2025	ES2533546	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW007	0020_QC205_251023	23 Oct 2025	1285219	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Flatrock Creek	Pathway	0020_MW017	0020_MW017_251020	20 Oct 2025	ES2533546	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Source	0020_MW037	0020_MW037_251020	20 Oct 2025	ES2533546	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	6.93	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW068	0020_MW068_251020	20 Oct 2025	ES2533546	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW069	0020_MW069_251020	20 Oct 2025	ES2533546	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW109	0020_MW109_251020	20 Oct 2025	ES2533546	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW109	0020_QC140_251020	20 Oct 2025	ES2533546	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW109	0020_QC240_251020	20 Oct 2025	1285219	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Flatrock Creek	Pathway	0020_MW110	0020_MW110_251020	20 Oct 2025	ES2533546	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Source	0020_MW112	0020_MW112_251020	20 Oct 2025	ES2533546	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Source	0020_SW016	0020_SW016_251020	20 Oct 2025	ES2533546	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW026	0020_QC120_251020	20 Oct 2025	ES2533546	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW026	0020_QC220_251020	20 Oct 2025	1285219	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Flatrock Creek	Receptor	0020_SW026	0020_SW026_251020	20 Oct 2025	ES2533546	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW027	0020_SW027_251020	20 Oct 2025	ES2533546	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW029	0020_SW029_251020	20 Oct 2025	ES2533546	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_SW030	0020_SW030_251022	22 Oct 2025	ES2533546	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW033	0020_SW033_251020	20 Oct 2025	ES2533546	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_SW054	0020_SW054_251020	20 Oct 2025	ES2533546	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Source	0021_MW026	0021_MW026_251021	21 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Source	0021_MW117	0021_MW117_251021	21 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Source	0021_MW118	0021_MW118_251021	21 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Source	0021_MW118	0021_QC140_251021	21 Oct 2025	ES2533538	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Source	0021_MW118	0021_QC240_251021	21 Oct 2025	1285374	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Flatrock Creek	Pathway	0021_MW125	0021_MW125_251022	22 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW126	0021_MW126_251022	22 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW128	0021_MW128_251021	21 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW160	0021_MW160_251021	21 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW163	0021_MW163_251022	22 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW164	0021_MW164_251021	21 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_SW022	0021_SW022_251022	22 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05

Statistics										
Number of Results	34	34	34	34	34	34	34	34	34	34
Number of Detects	0	0	0	0	0	0	0	1	0	0
Minimum Concentration	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.01	<0.05	<0.01	<0.01
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	6.93	ND	ND
Maximum Concentration	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	6.93	<0.05	<0.05
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	6.93	ND	ND
Average Concentration *	0.012	0.025	0.025	0.012	0.025	0.012	0.023	0.23	0.023	0.023
Geometric Average *	0.011	0.025	0.025	0.011	0.025	0.011	0.021	0.029	0.021	0.021
Median Concentration *	0.01	0.025	0.025	0.01	0.025	0.01	0.025	0.025	0.025	0.025



	PFAS - Perfluoroalkyl Sulfonamide						PFAS - Fluorotelomer Sulfonic Acids			
	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
EQL	0.02	0.05	0.05	0.02	0.05	0.02	0.01	0.05	0.01	0.01
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%										
PFAS NEMP 3.0 2025 Recreational water quality										

Standard Deviation *	0.0049	0	0	0.0049	0	0.0049	0.0065	1.2	0.0065	0.0065
Geometric Standard Deviation *	1.3	1	1	1.3	1	1.3	1.7	2.6	1.7	1.7
95% UCL (Student's-t) *	0.0132	0.025	0.025	0.0132	0.025	0.0132	0.0245	0.572	0.0245	0.0245
Number of Env Standard Exceedances	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
% of Detects	0	0	0	0	0	0	0	3	0	0
% of Non-Detects	100	100	100	100	100	100	100	97	100	100
% of Detects at or above Env Standards	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

* 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.



	PFAS			PFAS - Sums			PFAS - Perfluoroalkyl Sulfonic Acids						PFAS - Perfluoroalkyl Ether Sulfonic Acids				
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	PFAS (Sum of Total)(WA DER List)	Sum of PFHxS and PFOS	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)
	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	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.01	0.002	0.01	0.002	0.002	0.002	0.002
0020_0021_Human health consumption of biota						0.01											
ADWG 2011 Health (v4.0 updated June 2025)	0.008	0.03	0.2				1										
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13		220														
PFAS NEMP 3.0 2025 Recreational water quality	2	2	10			2											

Catchment	SPR	Location	Field ID	Date	Lab Report No.	PFOS	PFHxS	PFOA	PFAS (Sum of Total)	PFAS (Sum of Total)(WA DER List)	Sum of PFHxS and PFOS	PFBS	PFDS	PFNS	PFHpS	PFPrS	PFPeS	PFBA	PFDA	PFDoDA	PFHpA	PFHxA
Lakes	Receptor	0021_SW032	0021_SW032_251022	22 Oct 2025	ES2533521	<0.002	0.002	<0.002	0.002	0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.01	<0.002	<0.01	<0.002	<0.002	<0.002	<0.002
Lakes	Receptor	0021_SW034	0021_SW034_251022	22 Oct 2025	ES2533521	0.003	0.002	<0.002	0.005	0.005	0.005	<0.002	<0.002	<0.002	<0.002	<0.01	<0.002	<0.01	<0.002	<0.002	<0.002	<0.002
Lakes	Receptor	0021_SW037	0021_SW037_251021	21 Oct 2025	ES2533521	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.01	<0.002	<0.01	<0.002	<0.002	<0.002	<0.002
Lakes	Receptor	0021_SW040	0021_SW040_251021	21 Oct 2025	ES2533521	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.01	<0.002	<0.01	<0.002	<0.002	<0.002	<0.002

Statistics

Number of Results	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Number of Detects	1	2	0	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	<0.002	0.002	<0.002	0.002	0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.01	<0.002	<0.01	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Minimum Detect	0.003	0.002	ND	0.002	0.002	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	0.003	0.002	<0.002	0.005	0.005	0.005	<0.002	<0.002	<0.002	<0.002	<0.01	<0.002	<0.01	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Maximum Detect	0.003	0.002	ND	0.005	0.005	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *	0.0015	0.0015	0.001	0.0023	0.0023	0.0023	0.001	0.001	0.001	0.001	0.005	0.001	0.005	0.001	0.005	0.001	0.005	0.001	0.001	0.001	0.001
Geometric Average *	0.0013	0.0014	0.001	0.0018	0.0018	0.0018	0.001	0.001	0.001	0.001	0.005	0.001	0.005	0.001	0.005	0.001	0.005	0.001	0.001	0.001	0.001
Median Concentration *	0.001	0.0015	0.001	0.0015	0.0015	0.0015	0.001	0.001	0.001	0.001	0.005	0.001	0.005	0.001	0.005	0.001	0.005	0.001	0.001	0.001	0.001
Standard Deviation *	0.001	0.00058	0	0.0019	0.0019	0.0019	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Geometric Standard Deviation *	1.7	1.5	1	2.1	2.1	2.1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
95% UCL (Student's-t) *	0.00268	0.00218	0.001	0.00448	0.00448	0.00448	0.001	0.001	0.001	0.001	0.005	0.001	0.005	0.001	0.005	0.001	0.005	0.001	0.001	0.001	0.001
Number of Env Standard Exceedances	0	0	0	0	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	0	0	0	0
% of Detects	25	50	0	50	50	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Non-Detects	75	50	100	50	50	50	100	100	100	100	100	100	100	100	100	100	100	100	100	100	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	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	100	100	100	100

* A Non Detect Multiplier of 0.5 has been applied.



	Fluoroalkyl Carboxylic Acids						PFAS - Perfluoroalkyl Sulfonamide								PFAS - Fluorotelomer Sulfonic Acids			
	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTTrDA)	Perfluoroundecanoic acid (PFUnDA)	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	0.002	0.002	0.005	0.002	0.002	0.005	0.005	0.002	0.005	0.005	0.002	0.005	0.002	0.005	0.005	0.005	0.005	
0020_0021_Human health consumption of biota																		
ADWg 2011 Health (v4.0 updated June 2025)																		
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%																		
PFAS NEMP 3.0 2025 Recreational water quality																		

Catchment	SPR	Location	Field ID	Date	Lab Report No.																
Lakes	Receptor	0021_SW032	0021_SW032_251022	22 Oct 2025	ES2533521	<0.002	<0.002	<0.005	<0.002	<0.002	<0.005	<0.005	<0.002	<0.005	<0.005	<0.002	<0.005	<0.002	<0.005	<0.005	<0.005
Lakes	Receptor	0021_SW034	0021_SW034_251022	22 Oct 2025	ES2533521	<0.002	<0.002	<0.005	<0.002	<0.002	<0.005	<0.005	<0.002	<0.005	<0.005	<0.002	<0.005	<0.002	<0.005	<0.005	<0.005
Lakes	Receptor	0021_SW037	0021_SW037_251021	21 Oct 2025	ES2533521	<0.002	<0.002	<0.005	<0.002	<0.002	<0.005	<0.005	<0.002	<0.005	<0.005	<0.002	<0.005	<0.002	<0.005	<0.005	<0.005
Lakes	Receptor	0021_SW040	0021_SW040_251021	21 Oct 2025	ES2533521	<0.002	<0.002	<0.005	<0.002	<0.002	<0.005	<0.005	<0.002	<0.005	<0.005	<0.002	<0.005	<0.002	<0.005	<0.005	<0.005

Statistics																			
Number of Results	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	<0.002	<0.002	<0.005	<0.002	<0.002	<0.005	<0.005	<0.002	<0.005	<0.005	<0.002	<0.005	<0.002	<0.005	<0.002	<0.005	<0.005	<0.005	<0.005
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.002	<0.002	<0.005	<0.002	<0.002	<0.005	<0.005	<0.002	<0.005	<0.005	<0.002	<0.005	<0.002	<0.005	<0.002	<0.005	<0.005	<0.005	<0.005
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *	0.001	0.001	0.0025	0.001	0.001	0.0025	0.0025	0.001	0.0025	0.0025	0.001	0.0025	0.001	0.0025	0.001	0.0025	0.0025	0.0025	0.0025
Geometric Average *	0.001	0.001	0.0025	0.001	0.001	0.0025	0.0025	0.001	0.0025	0.0025	0.001	0.0025	0.001	0.0025	0.001	0.0025	0.0025	0.0025	0.0025
Median Concentration *	0.001	0.001	0.0025	0.001	0.001	0.0025	0.0025	0.001	0.0025	0.0025	0.001	0.0025	0.001	0.0025	0.001	0.0025	0.0025	0.0025	0.0025
Standard Deviation *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Geometric Standard Deviation *	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
95% UCL (Student's-t) *	0.001	0.001	0.0025	0.001	0.001	0.0025	0.0025	0.001	0.0025	0.0025	0.001	0.0025	0.001	0.0025	0.001	0.0025	0.0025	0.0025	0.0025
Number of Env Standard Exceedances	0	0	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	0	0
% of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Non-Detects	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	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	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	100	100

* A Non Detect Multiplier of 0.5 has been applied.



	PFAS			PFAS - Sums			PFAS - Perfluoroalkyl Sulfonic Acids						PFAS - Perfluoroalkanoic Acids					
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	PFAS (Sum of Total)(WA DER List)	Sum of PFHxS and PFOS	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	
	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	0.01	0.01	0.01	0.05	0.01	0.01	0.01	0.01	
0020_0021_Human health consumption of biota						0.01												
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13		220															
PFAS NEMP 3.0 2025 Recreational water quality	2	2	10			2												

Catchment	SPR	Location	Field ID	Date	Lab Report No.																
Lakes	Pathway	0021_MW129	0021_MW129_251021	21 Oct 2025	ES2533521	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
Lakes	Pathway	0021_MW130	0021_MW130_251021	21 Oct 2025	ES2533521	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
Lakes	Pathway	0021_MW135	0021_MW135_251022	22 Oct 2025	ES2533521	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
Lakes	Pathway	0021_MW136	0021_MW136_251022	22 Oct 2025	ES2533521	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
Lakes	Pathway	0021_MW136	0021_QC141_251022	22 Oct 2025	ES2533538	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
Lakes	Pathway	0021_MW136	0021_QC241_251022	22 Oct 2025	1285374	<0.01	<0.01	<0.01	<0.1	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01
Lakes	Pathway	0021_MW137	0021_MW137_251022	22 Oct 2025	ES2533521	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
Lakes	Pathway	0021_MW138	0021_MW138_251021	21 Oct 2025	ES2533521	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
Lakes	Pathway	0021_MW139	0021_MW139_251021	21 Oct 2025	ES2533521	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
Lakes	Pathway	0021_MW140	0021_MW140_251021	21 Oct 2025	ES2533521	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02

Statistics

Number of Results	10	10	10	10	10	10	10	10	1	10	1	10	10	10	10	10	10
Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	<0.01	<0.01	<0.01	<0.01	<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
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.01	<0.01	<0.01	<0.1	<0.05	<0.01	<0.02	<0.02	<0.01	<0.02	<0.01	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *	0.005	0.005	0.005	0.0095	0.007	0.005	0.0095	0.0095		0.0095		0.0095	0.048	0.0095	0.0095	0.0095	0.0095
Geometric Average *	0.005	0.005	0.005	0.0063	0.0059	0.005	0.0093	0.0093	0.005	0.0093	0.005	0.0093	0.047	0.0093	0.0093	0.0093	0.0093
Median Concentration *	0.005	0.005	0.005	0.005	0.005	0.005	0.01	0.01	0.005	0.01	0.005	0.01	0.05	0.01	0.01	0.01	0.01
Standard Deviation *	0	0	0	0.014	0.0063	0	0.0016	0.0016		0.0016		0.0016	0.0079	0.0016	0.0016	0.0016	0.0016
Geometric Standard Deviation *	1	1	1	2.1	1.7	1	1.2	1.2		1.2		1.2	1.2	1.2	1.2	1.2	1.2
95% UCL (Student's-t) *	0.005	0.005	0.005	0.0177	0.0107	0.005	0.0104	0.0104		0.0104		0.0104	0.0521	0.0104	0.0104	0.0104	0.0104
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Non-Detects	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	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

* A Non Detect Multiplier of 0.5 has been applied.



	yl Carboxylic Acids					PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTTrDA)	Perfluoroundecanoic acid (PFUnDA)	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
EQL	0.01	0.01	0.01	0.01	0.01	0.05	0.02	0.05	0.05	0.02	0.05	0.02	0.01	0.05	0.01	0.01
0020_0021_Human health consumption of biota																
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%																
PFAS NEMP 3.0 2025 Recreational water quality																

Catchment	SPR	Location	Field ID	Date	Lab Report No.															
Lakes	Pathway	0021_MW129	0021_MW129_251021	21 Oct 2025	ES2533521	<0.02	<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
Lakes	Pathway	0021_MW130	0021_MW130_251021	21 Oct 2025	ES2533521	<0.02	<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
Lakes	Pathway	0021_MW135	0021_MW135_251022	22 Oct 2025	ES2533521	<0.02	<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
Lakes	Pathway	0021_MW136	0021_MW136_251022	22 Oct 2025	ES2533521	<0.02	<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
Lakes	Pathway	0021_MW136	0021_QC141_251022	22 Oct 2025	ES2533538	<0.02	<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
Lakes	Pathway	0021_MW136	0021_QC241_251022	22 Oct 2025	1285374	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Lakes	Pathway	0021_MW137	0021_MW137_251022	22 Oct 2025	ES2533521	<0.02	<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
Lakes	Pathway	0021_MW138	0021_MW138_251021	21 Oct 2025	ES2533521	<0.02	<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
Lakes	Pathway	0021_MW139	0021_MW139_251021	21 Oct 2025	ES2533521	<0.02	<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
Lakes	Pathway	0021_MW140	0021_MW140_251021	21 Oct 2025	ES2533521	<0.02	<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

Statistics

Number of Results	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.01	<0.05	<0.01	<0.01
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *	0.0095	0.0095	0.023	0.0095	0.0095	0.025	0.012	0.025	0.025	0.012	0.025	0.012	0.023	0.025	0.023	0.023
Geometric Average *	0.0093	0.0093	0.021	0.0093	0.0093	0.025	0.011	0.025	0.025	0.011	0.025	0.011	0.021	0.025	0.021	0.021
Median Concentration *	0.01	0.01	0.025	0.01	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 *	0.0016	0.0016	0.0063	0.0016	0.0016	0	0.0047	0	0	0.0047	0	0.0047	0.0063	0	0.0063	0.0063
Geometric Standard Deviation *	1.2	1.2	1.7	1.2	1.2	1	1.3	1	1	1.3	1	1.3	1.7	1	1.7	1.7
95% UCL (Student's-t) *	0.0104	0.0104	0.0267	0.0104	0.0104	0.025	0.0142	0.025	0.025	0.0142	0.025	0.0142	0.0267	0.025	0.0267	0.0267
Number of Env Standard Exceedances	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
% of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Non-Detects	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
% of Detects at or above Env Standards	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

* A Non Detect Multiplier of 0.5 has been applied.



Appendix B
Table B3f
October 2025 OMP Water Analytical Results - Mary Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS			PFAS - Sums			PFAS - Perfluoroalkyl Sulfonic Acids					
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)
	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	0.01	0.01	0.01
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13		220									
PFAS NEMP 3.0 2025 Recreational water quality	2	2	10		2							

Catchment	SPR	Location	Field ID	Date	Lab Report No.												
Mary Creek	Source	0021_MW061	0021_MW061_251023	23 Oct 2025	ES2533521	4.29	1.52	0.09	6.66	5.81	6.41	0.08	<0.02	-	0.09	-	0.11
Mary Creek	Source	0021_MW063	0021_MW063_251022	22 Oct 2025	ES2533521	2.30	1.03	0.06	3.68	3.33	3.53	0.05	<0.02	-	0.07	-	0.08
Mary Creek	Source	0021_MW064	0021_MW064_251022	22 Oct 2025	ES2533521	0.28	0.32	<0.01	0.89	0.60	0.74	0.08	<0.02	-	<0.02	-	0.10
Mary Creek	Source	0021_MW064	0021_QC165_251022	22 Oct 2025	ES2533538	0.28	0.36	0.01	0.96	0.64	0.81	0.10	<0.02	-	<0.02	-	0.10
Mary Creek	Source	0021_MW064	0021_QC265_251022	22 Oct 2025	1285374	0.30 ^{#1}	0.33 ^{#1}	<0.01	0.9	0.63	0.8	0.09	<0.01	<0.01	<0.01	0.04	0.08 ^{#1}
Mary Creek	Source	0021_MW065	0021_MW065_251022	22 Oct 2025	ES2533521	0.25	0.32	0.02	0.89	0.57	0.84	0.04	<0.02	-	<0.02	-	0.05
Mary Creek	Source	0021_MW101	0021_MW101_251023	23 Oct 2025	ES2533521	0.18	0.13	<0.01	0.31	0.31	0.31	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_MW103	0021_MW103_251022	22 Oct 2025	ES2533521	50.8	50.2	2.79	132	101	120	3.86	0.03	-	3.49	-	5.96
Mary Creek	Source	0021_MW105	0021_MW105_251023	23 Oct 2025	ES2533521	18.0	3.60	0.16	23.3	21.6	22.6	0.08	<0.02	-	0.20	-	0.19
Mary Creek	Source	0021_MW106	0021_MW106_251022	22 Oct 2025	ES2533521	67.9	27.6	2.50	110	95.5	104	0.59	0.05	-	2.77	-	2.52
Mary Creek	Source	0021_MW107	0021_MW107_251023	23 Oct 2025	ES2533521	1.93	2.62	0.13	5.89	4.55	5.50	0.15	<0.02	-	0.12	-	0.21
Mary Creek	Source	0021_MW110	0021_MW110_251023	23 Oct 2025	ES2533521	<0.01	0.03	<0.01	0.03	0.03	0.03	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_MW111	0021_MW111_251023	23 Oct 2025	ES2533521	<0.01	0.01	<0.01	0.01	0.01	0.01	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_MW150	0021_MW150_251023	23 Oct 2025	ES2533521	22.2	3.48	0.32	27.4	25.7	26.6	0.12	<0.02	-	0.64	-	0.21
Mary Creek	Source	0021_MW153	0021_MW153_251023	23 Oct 2025	ES2533521	17.9	6.12	0.59	28.1	24.0	26.3	0.42	<0.02	-	0.84	-	0.74
Mary Creek	Source	0021_SW002	0021_SW002_251022	22 Oct 2025	ES2533521	2.35	1.46	0.07	4.54	3.81	4.28	0.10	<0.02	-	0.08	-	0.14
Mary Creek	Source	0021_SW153	0021_SW153_251023	23 Oct 2025	ES2533538	5.08	2.88	0.14	9.31	7.96	8.87	0.23	<0.02	-	0.16	-	0.21
Mary Creek	Pathway	0021_MW021	0021_MW021_251021	21 Oct 2025	ES2533521	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW021	0021_QC124_251021	21 Oct 2025	ES2533538	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW021	0021_QC224_251021	21 Oct 2025	1285374	<0.01	<0.01	<0.01	<0.1	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mary Creek	Pathway	0021_MW060	0021_MW060_251023	23 Oct 2025	ES2533521	0.06	0.02	<0.01	0.08	0.08	0.08	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW070	0021_MW070_251023	23 Oct 2025	ES2533521	26.2	2.91	0.20	30.6	29.1	29.8	0.11	<0.02	-	0.45	-	0.20
Mary Creek	Pathway	0021_MW071	0021_MW071_251023	23 Oct 2025	ES2533521	1.76	1.41	0.06	3.92	3.17	3.63	0.11	<0.02	-	0.06	-	0.18
Mary Creek	Pathway	0021_MW072	0021_MW072_251023	23 Oct 2025	ES2533521	18.4	6.69	0.54	28.0	25.1	26.7	0.22	<0.02	-	0.72	-	0.52
Mary Creek	Pathway	0021_MW112	0021_MW112_251023	23 Oct 2025	ES2533521	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW133	0021_MW133_251021	21 Oct 2025	ES2533521	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW133	0021_QC103_251021	21 Oct 2025	ES2533538	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW133	0021_QC203_251021	21 Oct 2025	1285374	<0.01	<0.01	<0.01	<0.1	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mary Creek	Pathway	0021_SW044	0021_SW044_251021	21 Oct 2025	ES2533538	0.13	0.04	<0.01	0.17	0.17	0.17	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_SW045	0021_SW045_251021	21 Oct 2025	ES2533538	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_SW048	0021_SW048_251021	21 Oct 2025	ES2533538	0.02	0.03	<0.01	0.05	0.05	0.05	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_SW053	0021_SW053_251021	21 Oct 2025	ES2533538	0.60	0.39	0.02	1.10	0.99	1.06	<0.02	<0.02	-	0.02	-	0.02
Mary Creek	Receptor	0021_SW043	0021_QC102_251021	21 Oct 2025	ES2533538	0.17	0.09	<0.01	0.26	0.26	0.26	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Receptor	0021_SW043	0021_QC202_251021	21 Oct 2025	1285374	0.15 ^{#1}	0.08 ^{#1}	<0.01	0.2	0.23	0.23	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mary Creek	Receptor	0021_SW043	0021_SW043_251021	21 Oct 2025	ES2533538	0.18	0.10	<0.01	0.28	0.28	0.28	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Receptor	0021_SW052	0021_SW052_251021	21 Oct 2025	ES2533538	0.05	0.03	<0.01	0.08	0.08	0.08	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Receptor	0021_SW211	0021_SW211_251021	21 Oct 2025	ES2533538	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	-	<0.02	-	<0.02

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.



Appendix B
Table B3f
October 2025 OMP Water Analytical Results - Mary Creek

	PFAS - Perfluoroalkyl Carboxylic Acids										N-Ethyl perfluorooctane sulfonamide (EtFOSA)
	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTTrDA)	Perfluoroundecanoic acid (PFUnDA)	
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
EQL	0.05	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.05
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%											
PFAS NEMP 3.0 2025 Recreational water quality											

Catchment	SPR	Location	Field ID	Date	Lab Report No.											
Mary Creek	Source	0021_MW061	0021_MW061_251023	23 Oct 2025	ES2533521	<0.1	<0.02	<0.02	0.05	0.32	<0.02	0.06	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW063	0021_MW063_251022	22 Oct 2025	ES2533521	<0.1	<0.02	<0.02	<0.02	0.09	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW064	0021_MW064_251022	22 Oct 2025	ES2533521	<0.1	<0.02	<0.02	<0.02	0.06	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW064	0021_QC165_251022	22 Oct 2025	ES2533538	<0.1	<0.02	<0.02	<0.02	0.06	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW064	0021_QC265_251022	22 Oct 2025	1285374	<0.05	<0.01	<0.01	<0.01	0.06	<0.01	0.02	<0.01	<0.01	<0.01	<0.05
Mary Creek	Source	0021_MW065	0021_MW065_251022	22 Oct 2025	ES2533521	<0.1	<0.02	<0.02	<0.02	0.17	<0.02	0.04	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW101	0021_MW101_251023	23 Oct 2025	ES2533521	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW103	0021_MW103_251022	22 Oct 2025	ES2533521	0.5	<0.02	<0.02	1.54	9.56	0.04	1.33	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW105	0021_MW105_251023	23 Oct 2025	ES2533521	<0.1	<0.02	<0.02	0.07	0.57	<0.02	0.08	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW106	0021_MW106_251022	22 Oct 2025	ES2533521	0.2	<0.02	<0.02	0.52	4.23	0.03	0.48	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW107	0021_MW107_251023	23 Oct 2025	ES2533521	0.1	<0.02	<0.02	0.06	0.42	<0.02	0.09	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW110	0021_MW110_251023	23 Oct 2025	ES2533521	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW111	0021_MW111_251023	23 Oct 2025	ES2533521	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW150	0021_MW150_251023	23 Oct 2025	ES2533521	<0.1	<0.02	<0.02	0.05	0.32	<0.02	0.06	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW153	0021_MW153_251023	23 Oct 2025	ES2533521	<0.1	<0.02	<0.02	0.16	0.94	<0.02	0.16	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_SW002	0021_SW002_251022	22 Oct 2025	ES2533521	<0.1	<0.02	<0.02	0.03	0.23	<0.02	0.04	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_251023	23 Oct 2025	ES2533538	<0.1	<0.02	<0.02	0.04	0.45	<0.02	0.05	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW021	0021_MW021_251021	21 Oct 2025	ES2533521	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW021	0021_QC124_251021	21 Oct 2025	ES2533538	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW021	0021_QC224_251021	21 Oct 2025	1285374	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05
Mary Creek	Pathway	0021_MW060	0021_MW060_251023	23 Oct 2025	ES2533521	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW070	0021_MW070_251023	23 Oct 2025	ES2533521	<0.1	<0.02	<0.02	0.05	0.30	<0.02	0.05	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW071	0021_MW071_251023	23 Oct 2025	ES2533521	<0.1	<0.02	<0.02	0.03	0.22	<0.02	0.04	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW072	0021_MW072_251023	23 Oct 2025	ES2533521	<0.1	<0.02	<0.02	0.12	0.62	<0.02	0.09	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW112	0021_MW112_251023	23 Oct 2025	ES2533521	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW133	0021_MW133_251021	21 Oct 2025	ES2533521	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW133	0021_QC103_251021	21 Oct 2025	ES2533538	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW133	0021_QC203_251021	21 Oct 2025	1285374	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05
Mary Creek	Pathway	0021_SW044	0021_SW044_251021	21 Oct 2025	ES2533538	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_SW045	0021_SW045_251021	21 Oct 2025	ES2533538	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_SW048	0021_SW048_251021	21 Oct 2025	ES2533538	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_SW053	0021_SW053_251021	21 Oct 2025	ES2533538	<0.1	<0.02	<0.02	<0.02	0.05	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Receptor	0021_SW043	0021_QC102_251021	21 Oct 2025	ES2533538	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Receptor	0021_SW043	0021_QC202_251021	21 Oct 2025	1285374	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05
Mary Creek	Receptor	0021_SW043	0021_SW043_251021	21 Oct 2025	ES2533538	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Receptor	0021_SW052	0021_SW052_251021	21 Oct 2025	ES2533538	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Receptor	0021_SW211	0021_SW211_251021	21 Oct 2025	ES2533538	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05

Comments
#1 Quantification of linear and branched isomers has been conducted as a single total response using the relative respo



Appendix B
Table B3f
October 2025 OMP Water Analytical Results - Mary Creek

	PFAS - Perfluoroalkyl Sulfonamide						PFAS - Fluorotelomer Sulfonic Acids			
	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
EQL	0.02	0.05	0.05	0.02	0.05	0.02	0.01	0.05	0.01	0.01
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%										
PFAS NEMP 3.0 2025 Recreational water quality										

Catchment	SPR	Location	Field ID	Date	Lab Report No.										
Mary Creek	Source	0021_MW061	0021_MW061_251023	23 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW063	0021_MW063_251022	22 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW064	0021_MW064_251022	22 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW064	0021_QC165_251022	22 Oct 2025	ES2533538	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW064	0021_QC265_251022	22 Oct 2025	1285374	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Mary Creek	Source	0021_MW065	0021_MW065_251022	22 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW101	0021_MW101_251023	23 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW103	0021_MW103_251022	22 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW105	0021_MW105_251023	23 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW106	0021_MW106_251022	22 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW107	0021_MW107_251023	23 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW110	0021_MW110_251023	23 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW111	0021_MW111_251023	23 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW150	0021_MW150_251023	23 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW153	0021_MW153_251023	23 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW002	0021_SW002_251022	22 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_251023	23 Oct 2025	ES2533538	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW021	0021_MW021_251021	21 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW021	0021_QC124_251021	21 Oct 2025	ES2533538	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW021	0021_QC224_251021	21 Oct 2025	1285374	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Mary Creek	Pathway	0021_MW060	0021_MW060_251023	23 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW070	0021_MW070_251023	23 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW071	0021_MW071_251023	23 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW072	0021_MW072_251023	23 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW112	0021_MW112_251023	23 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW133	0021_MW133_251021	21 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW133	0021_QC103_251021	21 Oct 2025	ES2533538	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW133	0021_QC203_251021	21 Oct 2025	1285374	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Mary Creek	Pathway	0021_SW044	0021_SW044_251021	21 Oct 2025	ES2533538	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW045	0021_SW045_251021	21 Oct 2025	ES2533538	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW048	0021_SW048_251021	21 Oct 2025	ES2533538	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW053	0021_SW053_251021	21 Oct 2025	ES2533538	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Receptor	0021_SW043	0021_QC102_251021	21 Oct 2025	ES2533538	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Receptor	0021_SW043	0021_QC202_251021	21 Oct 2025	1285374	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Mary Creek	Receptor	0021_SW043	0021_SW043_251021	21 Oct 2025	ES2533538	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Receptor	0021_SW052	0021_SW052_251021	21 Oct 2025	ES2533538	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Receptor	0021_SW211	0021_SW211_251021	21 Oct 2025	ES2533538	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05

Comments

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



	PFAS			PFAS - Sums			PFAS - Perfluoroalkyl Sulfonic Acids						PFAS - Perfluoroalk				
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPPS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)
	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	0.01	0.01	0.01	0.05	0.01	0.01	0.01	0.01
0020_0021_Activity specific HHRA EPC for RAN SSSS				39.7	37												

Catchment	SPR	Location	Field ID	Date	Lab Report No.																
RAN SSSS	Tank	0021_OTH001	0021_OTH001_251022	22 Oct 2025	ES2533521	0.05	0.03	<0.01	0.08	0.08	0.08	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
RAN SSSS	Tank	0021_OTH002	0021_OTH002_251022	22 Oct 2025	ES2533521	0.54	0.28	0.06	1.28	0.82	1.23	0.03	<0.02	-	<0.02	-	0.03	<0.1	0.02	<0.02	0.02
RAN SSSS	Tank	0021_OTH006	0021_OTH006_251022	22 Oct 2025	ES2533521	<0.01	<0.01	<0.01	0.03	<0.01	0.03	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	0.03
RAN SSSS	Tank	0021_OTH006	0021_QC104_251022	22 Oct 2025	ES2533538	<0.01	<0.01	<0.01	0.03	<0.01	0.03	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	0.03
RAN SSSS	Tank	0021_OTH006	0021_QC204_251022	22 Oct 2025	1285374	<0.01	<0.01	<0.01	<0.1	<0.01	0.06	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	0.03

Statistics

Number of Results	5	5	5	5	5	5	5	5	1	5	1	5	5	5	5	5	5
Number of Detects	2	2	1	4	2	5	2	0	0	0	0	1	0	1	0	1	4
Minimum Concentration	<0.01	<0.01	<0.01	0.03	<0.01	0.03	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.02
Minimum Detect	0.05	0.03	0.06	0.03	0.08	0.03	0.02	ND	ND	ND	ND	0.03	ND	0.02	ND	0.02	0.03
Maximum Concentration	0.54	0.28	0.06	1.28	0.82	1.23	0.03	<0.02	<0.01	<0.02	<0.01	0.03	<0.1	0.02	<0.02	0.02	0.26
Maximum Detect	0.54	0.28	0.06	1.28	0.82	1.23	0.03	ND	ND	ND	ND	0.03	ND	0.02	ND	0.02	0.26
Average Concentration *	0.12	0.065	0.016	0.29	0.18	0.29	0.016	0.009		0.009		0.013	0.045	0.011	0.009	0.011	0.072
Geometric Average *	0.02	0.016	0.0082	0.086	0.024	0.088	0.014	0.0087	0.005	0.0087	0.005	0.011	0.044	0.01	0.0087	0.01	0.037
Median Concentration *	0.005	0.005	0.005	0.05	0.005	0.06	0.01	0.01	0.005	0.01	0.005	0.01	0.05	0.01	0.01	0.01	0.03
Standard Deviation *	0.24	0.12	0.025	0.55	0.36	0.53	0.0089	0.0022		0.0022		0.0097	0.011	0.0055	0.0022	0.0055	0.11
Geometric Standard Deviation *	8.1	5.9	3	4.8	10	4.6	1.7	1.4		1.4		1.9	1.4	1.6	1.4	1.6	3.3
95% UCL (Student's-t) *	0.345	0.18	0.0395	0.82	0.524	0.79	0.0245	0.0111		0.0111		0.0223	0.0557	0.0162	0.0111	0.0162	0.173
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	40	40	20	80	40	100	40	0	0	0	0	20	0	20	0	20	80
% of Non-Detects	60	60	80	20	60	0	60	100	100	100	100	80	100	80	100	80	20
% 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

* A Non Detect Multiplier of 0.5 has been applied.



	yl Carboxylic Acids					PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTriDA)	Perfluoroundecanoic acid (PFUnDA)	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
EQL	0.01	0.01	0.01	0.01	0.01	0.05	0.02	0.05	0.05	0.02	0.05	0.02	0.01	0.05	0.01	0.01
0020_0021_Activity specific HHRA EPC for RAN SSSS																

Catchment	SPR	Location	Field ID	Date	Lab Report No.															
RAN SSSS	Tank	0021_OTH001	0021_OTH001_251022	22 Oct 2025	ES2533521	<0.02	<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
RAN SSSS	Tank	0021_OTH002	0021_OTH002_251022	22 Oct 2025	ES2533521	<0.02	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
RAN SSSS	Tank	0021_OTH006	0021_OTH006_251022	22 Oct 2025	ES2533521	<0.02	<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
RAN SSSS	Tank	0021_OTH006	0021_QC104_251022	22 Oct 2025	ES2533538	<0.02	<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
RAN SSSS	Tank	0021_OTH006	0021_QC204_251022	22 Oct 2025	1285374	<0.01	0.01	<0.01	<0.01	<0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01

Statistics																	
Number of Results	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Number of Detects	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	<0.01	0.01	<0.01	<0.01	<0.01	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.01	<0.05	<0.01	<0.01	<0.01
Minimum Detect	ND	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.02	0.04	<0.05	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Maximum Detect	ND	0.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *	0.009	0.016	0.021	0.009	0.009	0.025	0.013	0.025	0.025	0.013	0.025	0.013	0.021	0.025	0.021	0.021	0.021
Geometric Average *	0.0087	0.013	0.018	0.0087	0.0087	0.025	0.012	0.025	0.025	0.012	0.025	0.012	0.018	0.025	0.018	0.018	0.018
Median Concentration *	0.01	0.01	0.025	0.01	0.01	0.025	0.01	0.025	0.025	0.01	0.025	0.01	0.025	0.025	0.025	0.025	0.025
Standard Deviation *	0.0022	0.013	0.0089	0.0022	0.0022	0	0.0067	0	0	0.0067	0	0.0067	0.0089	0	0.0089	0.0089	0.0089
Geometric Standard Deviation *	1.4	1.9	2.1	1.4	1.4	1	1.5	1	1	1.5	1	1.5	2.1	1	2.1	2.1	2.1
95% UCL (Student's-t) *	0.0111	0.0288	0.0295	0.0111	0.0111	0.025	0.0194	0.025	0.025	0.0194	0.025	0.0194	0.0295	0.025	0.0295	0.0295	0.0295
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	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Non-Detects	100	60	100	100	100	100	100	100	100	100	100	100	100	100	100	100	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

* A Non Detect Multiplier of 0.5 has been applied.



	PFAS			PFAS - Sums			PFAS - Perfluoroalkyl Sulfonic Acids						PFAS - Perfluoroalkyl Sulfonates				
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)
EQL	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
	0.01	0.01	0.01	0.01	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

Catchment	SPR	Location	Field ID	Date	Lab Report No.																	
HMAS Creswell STP	Tank	0020_SW037	0020_QC100_251020	20 Oct 2025	ES2533546	0.34	0.22	0.02	0.65	0.56	0.65	0.03	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	0.04
HMAS Creswell STP	Tank	0020_SW037	0020_QC200_251020	20 Oct 2025	1285219	0.37 ^{#1}	0.22 ^{#1}	0.02 ^{#1}	0.7	0.59	0.66	0.02	<0.01	<0.01	0.01 ^{#1}	<0.01	0.02 ^{#1}	<0.05	<0.01	<0.01	<0.01	0.03
HMAS Creswell STP	Tank	0020_SW037	0020_SW037_251020	20 Oct 2025	ES2533546	0.35	0.14	0.01	0.53	0.49	0.53	0.03	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02

Statistics																		
Number of Results	3	3	3	3	3	3	3	3	1	3	1	3	3	3	3	3	3	
Number of Detects	3	3	3	3	3	3	3	0	0	1	0	1	0	0	0	0	2	
Minimum Concentration	0.34	0.14	0.01	0.53	0.49	0.53	0.02	<0.01	<0.01	0.01	<0.01	0.02	<0.05	<0.01	<0.01	<0.01	<0.02	
Minimum Detect	0.34	0.14	0.01	0.53	0.49	0.53	0.02	ND	ND	0.01	ND	0.02	ND	ND	ND	ND	0.03	
Maximum Concentration	0.37	0.22	0.02	0.7	0.59	0.66	0.03	<0.02	<0.01	<0.02	<0.01	0.02	<0.1	<0.02	<0.02	<0.02	0.04	
Maximum Detect	0.37	0.22	0.02	0.7	0.59	0.66	0.03	ND	ND	0.01	ND	0.02	ND	ND	ND	ND	0.04	
Average Concentration *	0.35	0.19	0.017	0.63	0.55	0.61	0.027	0.0083		0.01		0.013	0.042	0.0083	0.0083	0.0083	0.027	
Geometric Average *	0.35	0.19	0.016	0.62	0.55	0.61	0.026	0.0079	0.005	0.01	0.005	0.013	0.04	0.0079	0.0079	0.0079	0.023	
Median Concentration *	0.35	0.22	0.02	0.65	0.56	0.65	0.03	0.01	0.005	0.01	0.005	0.01	0.05	0.01	0.01	0.01	0.03	
Standard Deviation *	0.015	0.046	0.0058	0.087	0.051	0.072	0.0058	0.0029		0		0.0058	0.014	0.0029	0.0029	0.0029	0.015	
Geometric Standard Deviation *	1	1.3	1.5	1.2	1.1	1.1	1.3	1.5		1		1.5	1.5	1.5	1.5	1.5	2.1	
95% UCL (Student's-t) *	0.379	0.271	0.0264	0.774	0.633	0.735	0.0364	0.0132		0.01		0.0231	0.066	0.0132	0.0132	0.0132	0.0524	
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	100	100	100	100	100	100	100	0	0	33	0	33	0	0	0	0	67	
% of Non-Detects	0	0	0	0	0	0	0	100	100	67	100	67	100	100	100	100	33	
% 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	

* 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.



	yl Carboxylic Acids					PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTTrDA)	Perfluoroundecanoic acid (PFUnDA)	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
EQL	0.01	0.01	0.01	0.01	0.01	0.05	0.02	0.05	0.05	0.02	0.05	0.02	0.01	0.05	0.01	0.01

Catchment	SPR	Location	Field ID	Date	Lab Report No.																
HMAS Creswell STP	Tank	0020_SW037	0020_QC100_251020	20 Oct 2025	ES2533546	<0.02	<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
HMAS Creswell STP	Tank	0020_SW037	0020_QC200_251020	20 Oct 2025	1285219	<0.01	<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
HMAS Creswell STP	Tank	0020_SW037	0020_SW037_251020	20 Oct 2025	ES2533546	<0.02	<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

Statistics																			
Number of Results	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.02	<0.05	<0.01	<0.05	<0.01	<0.01
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *	0.0083	0.0083	0.018	0.0083	0.0083	0.025	0.015	0.025	0.025	0.015	0.025	0.015	0.025	0.015	0.018	0.025	0.018	0.018	0.018
Geometric Average *	0.0079	0.0079	0.015	0.0079	0.0079	0.025	0.014	0.025	0.025	0.014	0.025	0.014	0.025	0.014	0.015	0.025	0.015	0.015	0.015
Median Concentration *	0.01	0.01	0.025	0.01	0.01	0.025	0.01	0.025	0.025	0.01	0.025	0.01	0.025	0.01	0.025	0.025	0.025	0.025	0.025
Standard Deviation *	0.0029	0.0029	0.012	0.0029	0.0029	0	0.0087	0	0	0.0087	0	0.0087	0	0.0087	0.012	0	0.012	0.012	0.012
Geometric Standard Deviation *	1.5	1.5	2.5	1.5	1.5	1	1.7	1	1	1.7	1	1.7	1	1.7	2.5	1	2.5	2.5	2.5
95% UCL (Student's-t) *	0.0132	0.0132	0.0378	0.0132	0.0132	0.025	0.0296	0.025	0.025	0.0296	0.025	0.0296	0.025	0.0296	0.0378	0.025	0.0378	0.0378	0.0378
Number of Env Standard Exceedances	0	0	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	0	0
% of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Non-Detects	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	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	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	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.



	PFAS			PFAS - Sums			PFAS - Perfluoroalkyl Sulfonic Acids					
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluorohexane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)
EQL	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13		220									
PFAS NEMP 3.0 2025 Recreational water quality	2	2	10		2							

Catchment	SPR	Location	Field ID	Date	Lab Report No.											
Summercloud Creek	Pathway	0021_MW022	0021_MW022_251023	23 Oct 2025	ES2533521	0.65	0.59	0.04	1.41	1.24	1.32	<0.02	<0.02	-	0.06	0.03
Summercloud Creek	Pathway	0021_MW131	0021_MW131_251021	21 Oct 2025	ES2533521	0.05	0.08	<0.01	0.13	0.13	0.13	<0.02	<0.02	-	<0.02	<0.02
Summercloud Creek	Pathway	0021_MW132	0021_MW132_251021	21 Oct 2025	ES2533521	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	-	<0.02	<0.02
Summercloud Creek	Pathway	0021_SW057	0021_SW057_251021	21 Oct 2025	ES2533538	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	-	<0.02	<0.02
Summercloud Creek	Pathway	0021_SW058	0021_QC161_251021	21 Oct 2025	ES2533538	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	-	<0.02	<0.02
Summercloud Creek	Pathway	0021_SW058	0021_QC261_251021	21 Oct 2025	1285374	<0.01	<0.01	<0.01	<0.1	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01
Summercloud Creek	Pathway	0021_SW058	0021_SW058_251021	21 Oct 2025	ES2533538	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	-	<0.02	<0.02
Summercloud Creek	Receptor	0021_SW056	0021_SW056_251021	21 Oct 2025	ES2533538	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	-	<0.02	<0.02
Summercloud Creek	Receptor	0021_SW188	0021_QC162_251021	21 Oct 2025	ES2533538	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	-	<0.02	<0.02
Summercloud Creek	Receptor	0021_SW188	0021_QC262_251021	21 Oct 2025	1285374	<0.01	0.01 ^{#1}	0.01 ^{#1}	0.1	0.01	0.1	<0.01	<0.01	<0.01	<0.01	<0.01
Summercloud Creek	Receptor	0021_SW188	0021_SW188_251021	21 Oct 2025	ES2533538	<0.01	0.01	<0.01	0.01	0.01	0.01	<0.02	<0.02	-	<0.02	<0.02

Statistics																
Number of Results	11	11	11	11	11	11	11	11	11	11	2	11	2	11		
Number of Detects	2	4	2	4	4	4	4	0	0	0	0	1	0	1		
Minimum Concentration	<0.01	0.01	0.01	0.01	0.01	0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
Minimum Detect	0.05	0.01	0.01	0.01	0.01	0.01	0.01	ND	ND	ND	ND	0.06	ND	0.03		
Maximum Concentration	0.65	0.59	0.04	1.41	1.24	1.32	<0.02	<0.02	<0.01	<0.01	<0.01	0.06	<0.01	0.03		
Maximum Detect	0.65	0.59	0.04	1.41	1.24	1.32	ND	ND	ND	ND	ND	0.06	ND	0.03		
Average Concentration *	0.068	0.066	0.0086	0.16	0.13	0.15	0.0091	0.0091	0.005	0.014	0.005	0.011				
Geometric Average *	0.0096	0.011	0.0064	0.019	0.013	0.018	0.0088	0.0088	0.005	0.01	0.005	0.0097				
Median Concentration *	0.005	0.005	0.005	0.005	0.005	0.005	0.01	0.01	0.005	0.01	0.005	0.01				
Standard Deviation *	0.19	0.18	0.011	0.42	0.37	0.39	0.002	0.002	0	0.016	0	0.0066				
Geometric Standard Deviation *	4.8	4.7	1.9	6.9	6.1	6.6	1.3	1.3	1	1.9	1	1.6				
95% UCL (Student's-t) *	0.174	0.162	0.0144	0.386	0.332	0.361	0.0102	0.0102	0.005	0.0221	0.005	0.0145				
Number of Env Standard Exceedances	1	0	0	0	0	0	0	0	0	0	0	0				
Number of Env Standard Exceedances (Detects Only)	1	0	0	0	0	0	0	0	0	0	0	0				
% of Detects	18	36	18	36	36	36	0	0	0	9	0	9				
% of Non-Detects	82	64	82	64	64	64	100	100	100	91	100	91				
% of Detects at or above Env Standards	9	0	0	0	0	0	0	0	0	0	0	0				
% of Results Below Env Standards or Non-Detect	91	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.



	PFAS - Perfluoroalkyl Carboxylic Acids										
	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTriDA)	Perfluoroundecanoic acid (PFUnDA)	N-Ethyl perfluorooctane sulfonamide (EtFOA)
EQL	0.05	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.05
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%											
PFAS NEMP 3.0 2025 Recreational water quality											

Catchment	SPR	Location	Field ID	Date	Lab Report No.											
Summercloud Creek	Pathway	0021_MW022	0021_MW022_251023	23 Oct 2025	ES2533521	<0.1	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Summercloud Creek	Pathway	0021_MW131	0021_MW131_251021	21 Oct 2025	ES2533521	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Summercloud Creek	Pathway	0021_MW132	0021_MW132_251021	21 Oct 2025	ES2533521	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Summercloud Creek	Pathway	0021_SW057	0021_SW057_251021	21 Oct 2025	ES2533538	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Summercloud Creek	Pathway	0021_SW058	0021_QC161_251021	21 Oct 2025	ES2533538	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Summercloud Creek	Pathway	0021_SW058	0021_QC261_251021	21 Oct 2025	1285374	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05
Summercloud Creek	Pathway	0021_SW058	0021_SW058_251021	21 Oct 2025	ES2533538	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Summercloud Creek	Receptor	0021_SW056	0021_SW056_251021	21 Oct 2025	ES2533538	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Summercloud Creek	Receptor	0021_SW188	0021_QC162_251021	21 Oct 2025	ES2533538	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Summercloud Creek	Receptor	0021_SW188	0021_QC262_251021	21 Oct 2025	1285374	<0.05	<0.01	<0.01	<0.01	0.06	<0.01	0.02	<0.01	<0.01	<0.01	<0.05
Summercloud Creek	Receptor	0021_SW188	0021_SW188_251021	21 Oct 2025	ES2533538	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05

Statistics											
Number of Results	11	11	11	11	11	11	11	11	11	11	11
Number of Detects	0	0	0	0	2	0	1	0	0	0	0
Minimum Concentration	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05
Minimum Detect	ND	ND	ND	ND	0.04	ND	0.02	ND	ND	ND	ND
Maximum Concentration	<0.1	<0.02	<0.02	<0.02	0.06	<0.02	0.02	<0.05	<0.02	<0.02	<0.05
Maximum Detect	ND	ND	ND	ND	0.06	ND	0.02	ND	ND	ND	ND
Average Concentration *	0.045	0.0091	0.0091	0.0091	0.017	0.0091	0.01	0.021	0.0091	0.0091	0.025
Geometric Average *	0.044	0.0088	0.0088	0.0088	0.013	0.0088	0.01	0.019	0.0088	0.0088	0.025
Median Concentration *	0.05	0.01	0.01	0.01	0.01	0.01	0.01	0.025	0.01	0.01	0.025
Standard Deviation *	0.01	0.002	0.002	0.002	0.017	0.002	0.0035	0.0081	0.002	0.002	0
Geometric Standard Deviation *	1.3	1.3	1.3	1.3	2	1.3	1.4	1.9	1.3	1.3	1
95% UCL (Student's-t) *	0.051	0.0102	0.0102	0.0102	0.0261	0.0102	0.0124	0.0258	0.0102	0.0102	0.025
Number of Env Standard Exceedances	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
% of Detects	0	0	0	0	18	0	9	0	0	0	0
% of Non-Detects	100	100	100	100	82	100	91	100	100	100	100
% of Detects at or above Env Standards	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

* 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.



	PFAS - Perfluoroalkyl Sulfonamide						PFAS - Fluorotelomer Sulfonic Acids			
	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
EQL	0.02	0.05	0.05	0.02	0.05	0.02	0.01	0.05	0.01	0.01
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%										
PFAS NEMP 3.0 2025 Recreational water quality										

Catchment	SPR	Location	Field ID	Date	Lab Report No.										
Summercloud Creek	Pathway	0021_MW022	0021_MW022_251023	23 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_MW131	0021_MW131_251021	21 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_MW132	0021_MW132_251021	21 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_SW057	0021_SW057_251021	21 Oct 2025	ES2533538	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_SW058	0021_QC161_251021	21 Oct 2025	ES2533538	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_SW058	0021_QC261_251021	21 Oct 2025	1285374	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Summercloud Creek	Pathway	0021_SW058	0021_SW058_251021	21 Oct 2025	ES2533538	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Receptor	0021_SW056	0021_SW056_251021	21 Oct 2025	ES2533538	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Receptor	0021_SW188	0021_QC162_251021	21 Oct 2025	ES2533538	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Receptor	0021_SW188	0021_QC262_251021	21 Oct 2025	1285374	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Summercloud Creek	Receptor	0021_SW188	0021_SW188_251021	21 Oct 2025	ES2533538	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05

Statistics															
Number of Results	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.02	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *	0.013	0.025	0.025	0.013	0.025	0.013	0.025	0.013	0.021	0.025	0.021	0.021	0.021	0.021	0.021
Geometric Average *	0.012	0.025	0.025	0.012	0.025	0.012	0.025	0.012	0.019	0.025	0.019	0.019	0.019	0.019	0.019
Median Concentration *	0.01	0.025	0.025	0.01	0.025	0.01	0.025	0.01	0.025	0.025	0.025	0.025	0.025	0.025	0.025
Standard Deviation *	0.0061	0	0	0.0061	0	0.0061	0	0.0061	0.0081	0	0.0081	0.0081	0.0081	0.0081	0.0081
Geometric Standard Deviation *	1.4	1	1	1.4	1	1.4	1	1.4	1.9	1	1.9	1.9	1.9	1.9	1.9
95% UCL (Student's-t) *	0.016	0.025	0.025	0.016	0.025	0.016	0.025	0.016	0.0258	0.025	0.0258	0.0258	0.0258	0.0258	0.0258
Number of Env Standard Exceedances	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
% of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Non-Detects	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
% of Detects at or above Env Standards	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

* 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.



	PFAS			PFAS - Sums			PFAS - Perfluoroalkyl Sulfonic Acids				PFAS - Perfluoroalkyl Carboxylic Acids							
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	
	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	0.02	0.02	0.02	0.02	0.1	0.02	0.02	0.02	0.02	0.02	0.02	
0020_0021_Human health consumption of biota					0.01													
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13		220															
PFAS NEMP 3.0 2025 Recreational water quality	2	2	10		2													

Catchment	SPR	Location	Field ID	Date	Lab Report No.																
Telegraph Creek	Receptor	0021_SW068	0021_SW068_251020	20 Oct 2025	ES2533538	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02

Statistics																			
Number of Results	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *																			
Geometric Average *	0.005	0.005	0.005	0.005	0.005	0.005	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
Median Concentration *	0.005	0.005	0.005	0.005	0.005	0.005	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
Standard Deviation *																			
Geometric Standard Deviation *																			
95% UCL (Student's-t) *																			
Number of Env Standard Exceedances	0	0	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	0	0
% of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Non-Detects	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	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	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	100	100

* A Non Detect Multiplier of 0.5 has been applied.



				PFAS - Perfluoroalkyl Sulfonamide								PFAS - Fluorotelomer Sulfonic Acids			
	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTTrDA)	Perfluoroundecanoic acid (PFUnDA)	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	
EQL	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	
0020_0021_Human health consumption of biota															
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%															
PFAS NEMP 3.0 2025 Recreational water quality															

Catchment	SPR	Location	Field ID	Date	Lab Report No.													
Telegraph Creek	Receptor	0021_SW068	0021_SW068_251020	20 Oct 2025	ES2533538	<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

Statistics															
Number of Results	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	<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	<0.05
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<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	<0.05
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *															
Geometric Average *	0.025	0.01	0.01	0.025	0.01	0.025	0.025	0.01	0.025	0.01	0.025	0.025	0.025	0.025	0.025
Median Concentration *	0.025	0.01	0.01	0.025	0.01	0.025	0.025	0.01	0.025	0.01	0.025	0.025	0.025	0.025	0.025
Standard Deviation *															
Geometric Standard Deviation *															
95% UCL (Student's-t) *															
Number of Env Standard Exceedances	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
% of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Non-Detects	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
% of Detects at or above Env Standards	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

* A Non Detect Multiplier of 0.5 has been applied.



	PFAS			PFAS - Sums			PFAS - Perfluoroalkyl Sulfonic Acids					
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluorooheptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.005	0.0002	0.005	0.0002

Catchment	SPR	Location	Field ID	Date	Lab Report No.												
Captains Lagoon	Pathway	0021_SD009	0021_SD009_251023	23 Oct 2025	ES2533521	0.0071	0.0016	<0.0002	0.0087	0.0087	0.0087	<0.0002	<0.0002	-	<0.0002	-	<0.0002
Captains Lagoon	Pathway	0021_SD011	0021_SD011_251022	22 Oct 2025	ES2533521	0.0019	0.0007	<0.0002	0.0026	0.0026	0.0026	<0.0002	<0.0002	-	<0.0002	-	<0.0002
Captains Lagoon	Receptor	0020_SD019	0020_SD019_251020	20 Oct 2025	ES2533546	0.0019	<0.0002	<0.0002	0.0019	0.0019	0.0019	<0.0002	<0.0002	-	<0.0002	-	<0.0002
Captains Lagoon	Receptor	0020_SD024	0020_QC101_251020	20 Oct 2025	ES2533546	0.113	0.0030	0.0005	0.123	0.116	0.117	<0.0002	0.0015	-	0.0003	-	<0.0002
Captains Lagoon	Receptor	0020_SD024	0020_QC201_251020	20 Oct 2025	1285219	0.039	<0.005	<0.005	<0.05	0.039	0.039	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Captains Lagoon	Receptor	0020_SD024	0020_SD024_251020	20 Oct 2025	ES2533546	0.0743	0.0032	0.0004	0.0819	0.0775	0.0782	<0.0002	0.0011	-	0.0003	-	<0.0002
Flatrock Creek	Pathway	0021_SD018	0021_QC126_251022	22 Oct 2025	ES2533538	0.0375	0.0060	<0.0002	0.0435	0.0435	0.0435	<0.0002	<0.0002	-	<0.0002	-	<0.0002
Flatrock Creek	Pathway	0021_SD018	0021_QC226_251022	22 Oct 2025	1285374	0.012 ^{#2}	<0.005	<0.005	<0.05	0.012	0.012	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Flatrock Creek	Pathway	0021_SD018	0021_SD018_251022	22 Oct 2025	ES2533521	0.0382	0.0051	<0.0002	0.0440	0.0433	0.0440	0.0007	<0.0002	-	<0.0002	-	<0.0002
Flatrock Creek	Pathway	0021_SD021	0021_SD021_251021	21 Oct 2025	ES2533521	0.0360	0.0016	<0.0002	0.0380	0.0376	0.0380	0.0004	<0.0002	-	<0.0002	-	<0.0002
Flatrock Creek	Receptor	0020_SD002	0020_SD002_251020	20 Oct 2025	ES2533546	0.0004	<0.0002	<0.0002	0.0004	0.0004	0.0004	<0.0002	<0.0002	-	<0.0002	-	<0.0002
Flatrock Creek	Receptor	0020_SD004	0020_SD004_251020	20 Oct 2025	ES2533546	0.0005	<0.0002	<0.0002	0.0005	0.0005	0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0002
Mary Creek	Pathway	0021_SD036	0021_SD036_251021	21 Oct 2025	ES2533521	0.0015	<0.0002	<0.0002	0.0015	0.0015	0.0015	<0.0002	<0.0002	-	<0.0002	-	<0.0002
Mary Creek	Pathway	0021_SD037	0021_SD037_251021	21 Oct 2025	ES2533521	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	<0.0002	-	<0.0002
Mary Creek	Pathway	0021_SD040	0021_SD040_251021	21 Oct 2025	ES2533521	0.0017	0.0006	<0.0002	0.0023	0.0023	0.0023	<0.0002	<0.0002	-	<0.0002	-	<0.0002
Mary Creek	Receptor	0021_SD035	0021_SD035_251021	21 Oct 2025	ES2533521	0.0076	0.0010	<0.0002	0.0086	0.0086	0.0086	<0.0002	<0.0002	-	<0.0002	-	<0.0002
Mary Creek	Receptor	0021_SD044	0021_SD044_251021	21 Oct 2025	ES2533521	0.0003	<0.0002	<0.0002	0.0003	0.0003	0.0003	<0.0002	<0.0002	-	<0.0002	-	<0.0002

Comments

#1 Reported Analyte LOR is higher than Requested Analyte LOR

#2 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.



	PFAS - Perfluoroalkyl Carboxylic Acids											
	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTTrDA)	Perfluoroundecanoic acid (PFUnDA)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0005	0.0002	0.0002	0.0005	0.0002

Catchment	SPR	Location	Field ID	Date	Lab Report No.												
Captains Lagoon	Pathway	0021_SD009	0021_SD009_251023	23 Oct 2025	ES2533521	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002
Captains Lagoon	Pathway	0021_SD011	0021_SD011_251022	22 Oct 2025	ES2533521	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002
Captains Lagoon	Receptor	0020_SD019	0020_SD019_251020	20 Oct 2025	ES2533546	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002
Captains Lagoon	Receptor	0020_SD024	0020_QC101_251020	20 Oct 2025	ES2533546	<0.001	0.0006	<0.0002	<0.0002	0.0004	<0.0002	<0.0002	<0.0006 ^{#1}	<0.0002	0.0011	<0.0006 ^{#1}	<0.0002
Captains Lagoon	Receptor	0020_SD024	0020_QC201_251020	20 Oct 2025	1285219	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01
Captains Lagoon	Receptor	0020_SD024	0020_SD024_251020	20 Oct 2025	ES2533546	<0.001	0.0004	<0.0002	<0.0002	0.0003	<0.0002	<0.0002	<0.0005	<0.0002	0.0005	<0.0005	<0.0002
Flatrock Creek	Pathway	0021_SD018	0021_QC126_251022	22 Oct 2025	ES2533538	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0006 ^{#1}	<0.0002	<0.0002	<0.0006 ^{#1}	<0.0002
Flatrock Creek	Pathway	0021_SD018	0021_QC226_251022	22 Oct 2025	1285374	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01
Flatrock Creek	Pathway	0021_SD018	0021_SD018_251022	22 Oct 2025	ES2533521	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0006 ^{#1}	<0.0002	<0.0002	<0.0006 ^{#1}	<0.0002
Flatrock Creek	Pathway	0021_SD021	0021_SD021_251021	21 Oct 2025	ES2533521	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002
Flatrock Creek	Receptor	0020_SD002	0020_SD002_251020	20 Oct 2025	ES2533546	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002
Flatrock Creek	Receptor	0020_SD004	0020_SD004_251020	20 Oct 2025	ES2533546	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Pathway	0021_SD036	0021_SD036_251021	21 Oct 2025	ES2533521	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Pathway	0021_SD037	0021_SD037_251021	21 Oct 2025	ES2533521	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Pathway	0021_SD040	0021_SD040_251021	21 Oct 2025	ES2533521	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Receptor	0021_SD035	0021_SD035_251021	21 Oct 2025	ES2533521	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Receptor	0021_SD044	0021_SD044_251021	21 Oct 2025	ES2533521	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002

Comments

- #1 Reported Analyte LOR is higher than Requested Analyte LOR
- #2 Quantification of linear and branched isomers has been conducted as a single total response using the relative r



	PFAS - Perfluoroalkyl Sulfonamide					PFAS - Fluorotelomer Sulfonic Acids			
	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)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.0005	0.0005	0.0002	0.0005	0.0002	0.0005	0.0005	0.0005	0.0005

Catchment	SPR	Location	Field ID	Date	Lab Report No.									
Captains Lagoon	Pathway	0021_SD009	0021_SD009_251023	23 Oct 2025	ES2533521	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Captains Lagoon	Pathway	0021_SD011	0021_SD011_251022	22 Oct 2025	ES2533521	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Captains Lagoon	Receptor	0020_SD019	0020_SD019_251020	20 Oct 2025	ES2533546	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Captains Lagoon	Receptor	0020_SD024	0020_QC101_251020	20 Oct 2025	ES2533546	<0.0006 ^{#1}	<0.0006 ^{#1}	<0.0002	<0.0006 ^{#1}	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Captains Lagoon	Receptor	0020_SD024	0020_QC201_251020	20 Oct 2025	1285219	<0.005	<0.005	<0.01	0.0052	<0.005	<0.005	<0.01	<0.005	<0.005
Captains Lagoon	Receptor	0020_SD024	0020_SD024_251020	20 Oct 2025	ES2533546	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Pathway	0021_SD018	0021_QC126_251022	22 Oct 2025	ES2533538	<0.0006 ^{#1}	<0.0006 ^{#1}	<0.0002	<0.0006 ^{#1}	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Pathway	0021_SD018	0021_QC226_251022	22 Oct 2025	1285374	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005
Flatrock Creek	Pathway	0021_SD018	0021_SD018_251022	22 Oct 2025	ES2533521	<0.0006 ^{#1}	<0.0006 ^{#1}	<0.0002	<0.0006 ^{#1}	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Pathway	0021_SD021	0021_SD021_251021	21 Oct 2025	ES2533521	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Receptor	0020_SD002	0020_SD002_251020	20 Oct 2025	ES2533546	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Receptor	0020_SD004	0020_SD004_251020	20 Oct 2025	ES2533546	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Pathway	0021_SD036	0021_SD036_251021	21 Oct 2025	ES2533521	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Pathway	0021_SD037	0021_SD037_251021	21 Oct 2025	ES2533521	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Pathway	0021_SD040	0021_SD040_251021	21 Oct 2025	ES2533521	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Receptor	0021_SD035	0021_SD035_251021	21 Oct 2025	ES2533521	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Receptor	0021_SD044	0021_SD044_251021	21 Oct 2025	ES2533521	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005

Comments

- #1 Reported Analyte LOR is higher than Requested Analyte LOR
- #2 Quantification of linear and branched isomers has been conducted as a single total response using the relative r



	PFAS			PFAS - Sums			PFAS - Perfluoroalkyl Sulfonic Acids				PFAS - Perfluoroalkyl Carboxylic					
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorohexane sulfonic acid (PFHpS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluorooheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.001	0.0002	0.0002	0.0002	0.0002	0.0002
0020_0021_Activity specific HHRA EPC for clay pools				0.0014												

Catchment	SPR	Location	Field ID	Date	Lab Report No.														
Clay Pools	Receptor	0021_SD066	0021_SD066_251023	23 Oct 2025	ES2533521	0.0004	<0.0002	<0.0002	0.0004	0.0004	0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Clay Pools	Receptor	0021_SD067	0021_SD067_251023	23 Oct 2025	ES2533521	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Clay Pools	Receptor	0021_SD068	0021_SD068_251023	23 Oct 2025	ES2533521	0.0006	<0.0002	<0.0002	0.0006	0.0006	0.0006	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Clay Pools	Receptor	0021_SD069	0021_SD069_251023	23 Oct 2025	ES2533521	0.0061	<0.0002	<0.0002	0.0061	0.0061	0.0061	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.0002	<0.0002	<0.0002

Statistics

Number of Results	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Number of Detects	3	0	0	3	3	3	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Minimum Detect	0.0004	ND	ND	0.0004	0.0004	0.0004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	0.0061	<0.0002	<0.0002	0.0061	0.0061	0.0061	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Maximum Detect	0.0061	ND	ND	0.0061	0.0061	0.0061	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *	0.0018	0.0001	0.0001	0.0018	0.0018	0.0018	0.0001	0.0001	0.0001	0.0001	0.0005	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Geometric Average *	0.00062	0.0001	0.0001	0.00062	0.00062	0.00062	0.0001	0.0001	0.0001	0.0001	0.0005	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Median Concentration *	0.0005	0.0001	0.0001	0.0005	0.0005	0.0005	0.0001	0.0001	0.0001	0.0001	0.0005	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Standard Deviation *	0.0029	0	0	0.0029	0.0029	0.0029	0	0	0	0	0	0	0	0	0	0	0
Geometric Standard Deviation *	5.5	1	1	5.5	5.5	5.5	1	1	1	1	1	1	1	1	1	1	1
95% UCL (Student's-t) *	0.00518	0.0001	0.0001	0.00518	0.00518	0.00518	0.0001	0.0001	0.0001	0.0001	0.0005	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Number of Env Standard Exceedances	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Number of Env Standard Exceedances (Detects Only)	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
% of Detects	75	0	0	75	75	75	0	0	0	0	0	0	0	0	0	0	0
% of Non-Detects	25	100	100	25	25	25	100	100	100	100	100	100	100	100	100	100	100
% of Detects at or above Env Standards	25	0	0	0	25	0	0	0	0	0	0	0	0	0	0	0	0
% of Results Below Env Standards or Non-Detect	75	100	100	100	75	100	100	100	100	100	100	100	100	100	100	100	100

* A Non Detect Multiplier of 0.5 has been applied.



	Acids				PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTTrDA)	Perfluoroundecanoic acid (PFUnDA)	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)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.0002	0.0005	0.0002	0.0002	0.0005	0.0002	0.0005	0.0005	0.0002	0.0005	0.0002	0.0005	0.0005	0.0005	0.0005
0020_0021_Activity specific HHRA EPC for clay pools															

Catchment	SPR	Location	Field ID	Date	Lab Report No.														
Clay Pools	Receptor	0021_SD066	0021_SD066_251023	23 Oct 2025	ES2533521	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD067	0021_SD067_251023	23 Oct 2025	ES2533521	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD068	0021_SD068_251023	23 Oct 2025	ES2533521	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD069	0021_SD069_251023	23 Oct 2025	ES2533521	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005

Statistics																
Number of Results	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *	0.0001	0.00025	0.0001	0.0001	0.00025	0.0001	0.00025	0.00025	0.00025	0.0001	0.00025	0.0001	0.00025	0.00025	0.00025	0.00025
Geometric Average *	0.0001	0.00025	0.0001	0.0001	0.00025	0.0001	0.00025	0.00025	0.00025	0.0001	0.00025	0.0001	0.00025	0.00025	0.00025	0.00025
Median Concentration *	0.0001	0.00025	0.0001	0.0001	0.00025	0.0001	0.00025	0.00025	0.00025	0.0001	0.00025	0.0001	0.00025	0.00025	0.00025	0.00025
Standard Deviation *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Geometric Standard Deviation *	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
95% UCL (Student's-t) *	0.0001	0.00025	0.0001	0.0001	0.00025	0.0001	0.00025	0.00025	0.00025	0.0001	0.00025	0.0001	0.00025	0.00025	0.00025	0.00025
Number of Env Standard Exceedances	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
% of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Non-Detects	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
% of Detects at or above Env Standards	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

* A Non Detect Multiplier of 0.5 has been applied.



	PFAS			PFAS - Sums			PFAS - Perfluoroalkyl Sulfonic Acids				PFAS - Perfluoroalkyl Carboxylic					
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorohexane sulfonic acid (PFHpS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluorooheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)
EQL	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
0020_0021_Human health ceremonial	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.001	0.0002	0.0002	0.0002	0.0002	0.0002

Catchment	SPR	Location	Field ID	Date	Lab Report No.														
Summercloud Creek	Receptor	0021_SD046	0021_SD046_251021	21 Oct 2025	ES2533521	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Summercloud Creek	Receptor	0021_SD188	0021_SD188_251021	21 Oct 2025	ES2533521	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002

Statistics

Number of Results	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0005	0.0001	0.0001	0.0001	0.0001	0.0001
Geometric Average *	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0005	0.0001	0.0001	0.0001	0.0001	0.0001
Median Concentration *	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0005	0.0001	0.0001	0.0001	0.0001	0.0001
Standard Deviation *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Geometric Standard Deviation *	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
95% UCL (Student's-t) *	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0005	0.0001	0.0001	0.0001	0.0001	0.0001
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Non-Detects	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	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

* A Non Detect Multiplier of 0.5 has been applied.



	Acids				PFAS - Perfluoroalkyl Sulfonamide								PFAS - Fluorotelomer Sulfonic Acids			
	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTTrDA)	Perfluoroundecanoic acid (PFUnDA)	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)	
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.0002	0.0005	0.0002	0.0002	0.0005	0.0002	0.0005	0.0005	0.0002	0.0005	0.0002	0.0005	0.0005	0.0005	0.0005	0.0005
0020_0021_Human health ceremonial																

Catchment	SPR	Location	Field ID	Date	Lab Report No.														
Summercloud Creek	Receptor	0021_SD046	0021_SD046_251021	21 Oct 2025	ES2533521	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005
Summercloud Creek	Receptor	0021_SD188	0021_SD188_251021	21 Oct 2025	ES2533521	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005

Statistics																
Number of Results	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *	0.0001	0.00025	0.0001	0.0001	0.00025	0.0001	0.00025	0.00025	0.0001	0.00025	0.0001	0.00025	0.0001	0.00025	0.00025	0.00025
Geometric Average *	0.0001	0.00025	0.0001	0.0001	0.00025	0.0001	0.00025	0.00025	0.0001	0.00025	0.0001	0.00025	0.0001	0.00025	0.00025	0.00025
Median Concentration *	0.0001	0.00025	0.0001	0.0001	0.00025	0.0001	0.00025	0.00025	0.0001	0.00025	0.0001	0.00025	0.0001	0.00025	0.00025	0.00025
Standard Deviation *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Geometric Standard Deviation *	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
95% UCL (Student's-t) *	0.0001	0.00025	0.0001	0.0001	0.00025	0.0001	0.00025	0.00025	0.0001	0.00025	0.0001	0.00025	0.0001	0.00025	0.00025	0.00025
Number of Env Standard Exceedances	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
% of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Non-Detects	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
% of Detects at or above Env Standards	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

* A Non Detect Multiplier of 0.5 has been applied.



	PFAS			PFAS - Sums			PFAS - Perfluoroalkyl Sulfonic Acids					
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)
	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	0.0003	0.0005	0.0005	0.01	0.0003	0.0003	0.0005	0.02	0.02	0.02	0.002	0.02
0020_0021_Human health consumption of biota					0.01							
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13		220									

Catchment	SPR	Location	Field ID	Date	Lab Report No.												
Bherwerre Barrier	Receptor	0021_SW212	0021_SW212_241025	25 Oct 2024	ES2435541	0.0048	0.0017	<0.0005	-	0.0065	0.0065	<0.0005	-	-	-	<0.002	-
Bherwerre Barrier	Receptor	0021_SW212	0021_SW212_250404	04 Apr 2025	ES2510623	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.1	<0.02
Bherwerre Barrier	Receptor	0021_SW212	0021_SW212_251021	21 Oct 2025	ES2533538	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.1	<0.02

Statistics

Number of Results	3	3	3	2	3	3	3	2	2	2	2	3	2
Number of Detects	1	1	0	0	1	1	0	0	0	0	0	0	0
Minimum Concentration	0.0048	0.0017	<0.0005	<0.01	0.0065	0.0065	<0.0005	<0.02	<0.02	<0.02	<0.02	<0.002	<0.02
Minimum Detect	0.0048	0.0017	ND	ND	0.0065	0.0065	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.1	<0.02
Maximum Detect	0.0048	0.0017	ND	ND	0.0065	0.0065	ND	ND	ND	ND	ND	ND	ND
Average Concentration *	0.0049	0.0039	0.0034	0.005	0.0055	0.0055	0.0068	0.01	0.01	0.01	0.01	0.034	0.01
Geometric Average *	0.0049	0.0035	0.0018	0.005	0.0055	0.0055	0.0029	0.01	0.01	0.01	0.01	0.014	0.01
Median Concentration *	0.005	0.005	0.005	0.005	0.005	0.005	0.01	0.01	0.01	0.01	0.01	0.05	0.01
Standard Deviation *	0.00012	0.0019	0.0027	0	0.00087	0.00087	0.0056	0	0	0	0	0.028	0
Geometric Standard Deviation *	1	1.9	5.6	1	1.2	1.2	8.4	1	1	1	1	9.6	1
95% UCL (Student's-t) *	0.00513	0.00711	0.00804	0.005	0.00696	0.00696	0.0162	0.01	0.01	0.01	0.01	0.0814	0.01
Number of Env Standard Exceedances	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
% of Detects	33	33	0	0	33	33	0	0	0	0	0	0	0
% of Non-Detects	67	67	100	100	67	67	100	100	100	100	100	100	100
% of Detects at or above Env Standards	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

* A Non Detect Multiplier of 0.5 has been applied.



	PFAS - Perfluoroalkyl Carboxylic Acids										
	Perfluorooctane sulfonic acid (PFOS)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	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
EQL	0.0003	0.02	0.0005	0.0005	0.02	0.0005	0.05	0.02	0.02	0.05	0.02
0020_0021_Human health consumption of biota											
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13										

Catchment	SPR	Location	Field ID	Date	Lab Report No.										
Bherwerre Barrier	Receptor	0021_SW212	0021_SW212_241025	25 Oct 2024	ES2435541	0.0048	-	<0.0005	<0.0005	-	<0.0005	-	-	-	-
Bherwerre Barrier	Receptor	0021_SW212	0021_SW212_250404	04 Apr 2025	ES2510623	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.02
Bherwerre Barrier	Receptor	0021_SW212	0021_SW212_251021	21 Oct 2025	ES2533538	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.02

Statistics

Number of Results	3	2	3	3	2	3	2	2	2	2	2
Number of Detects	1	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	0.0048	<0.02	<0.0005	<0.0005	<0.02	<0.0005	<0.05	<0.02	<0.02	<0.05	<0.02
Minimum Detect	0.0048	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05	<0.02
Maximum Detect	0.0048	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *	0.0049	0.01	0.0068	0.0068	0.01	0.0068	0.025	0.01	0.01	0.025	0.01
Geometric Average *	0.0049	0.01	0.0029	0.0029	0.01	0.0029	0.025	0.01	0.01	0.025	0.01
Median Concentration *	0.005	0.01	0.01	0.01	0.01	0.01	0.025	0.01	0.01	0.025	0.01
Standard Deviation *	0.00012	0	0.0056	0.0056	0	0.0056	0	0	0	0	0
Geometric Standard Deviation *	1	1	8.4	8.4	1	8.4	1	1	1	1	1
95% UCL (Student's-t) *	0.00513	0.01	0.0162	0.0162	0.01	0.0162	0.025	0.01	0.01	0.025	0.01
Number of Env Standard Exceedances	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
% of Detects	33	0	0	0	0	0	0	0	0	0	0
% of Non-Detects	67	100	100	100	100	100	100	100	100	100	100
% of Detects at or above Env Standards	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

* A Non Detect Multiplier of 0.5 has been applied.



	PFAS - Perfluoroalkyl Sulfonamide						PFAS - Fluorotelomer Sulfonic Acids			
	Perfluorooctane sulfonic acid (PFOS)	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
EQL	0.0003	0.05	0.05	0.02	0.05	0.02	0.001	0.001	0.001	0.001
0020_0021_Human health consumption of biota										
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13									

Catchment	SPR	Location	Field ID	Date	Lab Report No.										
Bherwerre Barrier	Receptor	0021_SW212	0021_SW212_241025	25 Oct 2024	ES2435541	0.0048	-	-	-	-	-	<0.001	<0.001	<0.001	<0.001
Bherwerre Barrier	Receptor	0021_SW212	0021_SW212_250404	04 Apr 2025	ES2510623	<0.01	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Bherwerre Barrier	Receptor	0021_SW212	0021_SW212_251021	21 Oct 2025	ES2533538	<0.01	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05

Statistics

Number of Results	3	2	2	2	2	2	3	3	3	3
Number of Detects	1	0	0	0	0	0	0	0	0	0
Minimum Concentration	0.0048	<0.05	<0.05	<0.02	<0.05	<0.02	<0.001	<0.001	<0.001	<0.001
Minimum Detect	0.0048	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.01	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Maximum Detect	0.0048	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *	0.0049	0.025	0.025	0.01	0.025	0.01	0.017	0.017	0.017	0.017
Geometric Average *	0.0049	0.025	0.025	0.01	0.025	0.01	0.0068	0.0068	0.0068	0.0068
Median Concentration *	0.005	0.025	0.025	0.01	0.025	0.01	0.025	0.025	0.025	0.025
Standard Deviation *	0.00012	0	0	0	0	0	0.014	0.014	0.014	0.014
Geometric Standard Deviation *	1	1	1	1	1	1	9.6	9.6	9.6	9.6
95% UCL (Student's-t) *	0.00513	0.025	0.025	0.01	0.025	0.01	0.0407	0.0407	0.0407	0.0407
Number of Env Standard Exceedances	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
% of Detects	33	0	0	0	0	0	0	0	0	0
% of Non-Detects	67	100	100	100	100	100	100	100	100	100
% of Detects at or above Env Standards	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

* A Non Detect Multiplier of 0.5 has been applied.



Appendix B
Table B5b
Historical Water Analytical Results - Captains Lagoon

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids				
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Sum of US EPA PFAS (PFOS + PFOA)*	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPrS)
	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	0.0001	0.0005	0.0005	0.0003	0.0003	0.0003	0.01	0.01	0.0005	0.0005	0.01	0.0005	0.01
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13		220										
PFAS NEMP 3.0 2025 Recreational water quality	2	2	10		2								

Catchment	SPR	Location	Field ID	Date	Lab Report No.													
Captains Lagoon	Source	0020_MW052	0020_MW052_211221	21 Dec 2021	ES2147062	0.01	0.12	<0.01	0.13	0.13	0.13	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0020_MW052	0020_MW052_250331	31 Mar 2025	ES2510618	0.02	0.02	<0.01	0.04	0.04	0.04	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0020_MW052	0020_MW052_251020	20 Oct 2025	ES2533546	<0.01	0.02	<0.01	0.02	0.02	0.02	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW028	MW028	03 May 2017	ES1710866	0.0023	0.0018	<0.0005	0.0041	0.0041	0.0041	-	-	<0.0005	<0.0005	-	<0.0005	-
Captains Lagoon	Source	0021_MW028	0021_MW028_211020	20 Oct 2021	ES2138639	0.13	0.13	<0.01	0.32	0.26	0.32	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW028	0021_QC103_211020	20 Oct 2021	ES2138639	0.13	0.14	<0.01	0.33	0.27	0.33	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW028	0021_MW028_220406	06 Apr 2022	ES2212442	0.16	0.10	<0.01	0.30	0.26	0.30	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW028	0021_QC204_220406	06 Apr 2022	293031	0.31	0.31	0.01	0.87	0.62	-	0.32	-	0.02	<0.02	-	<0.01	-
Captains Lagoon	Source	0021_MW028	0021_MW028_221014	14 Oct 2022	ES2237106	0.19	0.30	0.01	0.71	0.49	0.69	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW028	0021_MW028_230421	21 Apr 2023	ES2313364	0.71	1.15	0.04	2.47	1.86	2.34	-	-	0.06	<0.02	-	0.03	-
Captains Lagoon	Source	0021_MW028	0021_MW028_231019	19 Oct 2023	ES2336398	0.16	0.30	0.01	0.63	0.46	0.61	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW028	0021_MW028_240412	12 Apr 2024	ES2411994	0.20	0.24	0.01	0.56	0.44	0.54	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW028	0021_MW028_241022	22 Oct 2024	ES2435078	0.09	0.18	<0.01	0.49	0.27	0.47	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW028	0021_QC103_241022	22 Oct 2024	ES2435078	0.10	0.18	<0.01	0.51	0.28	0.49	-	-	0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW028	0021_QC203_241022	22 Oct 2024	1154751	0.11	0.24	0.01	0.56	0.35	0.54	0.12	0.36	0.02	<0.01	<0.01	<0.01	<0.01
Captains Lagoon	Source	0021_MW028	0021_MW028_250402	02 Apr 2025	ES2510113	0.50	1.03	0.04	2.79	1.53	2.63	-	-	0.10	<0.02	-	0.02	-
Captains Lagoon	Source	0021_MW028	0021_MW028_251021	21 Oct 2025	ES2533521	0.03	0.04	<0.01	0.07	0.07	0.07	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW028	0021_QC123_251021	21 Oct 2025	ES2533538	0.04	0.04	<0.01	0.10	0.08	0.10	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW028	0021_QC223_251021	21 Oct 2025	1285374	0.07 ^{#1}	0.04 ^{#1}	<0.01	0.1	0.11	0.12	-	-	<0.01	<0.01	<0.01	<0.01	<0.01
Captains Lagoon	Source	0021_MW030	MW030	03 May 2017	ES1710866	0.0021	0.0012	<0.0005	0.0033	0.0033	0.0033	-	-	<0.0005	<0.0005	-	<0.0005	-
Captains Lagoon	Source	0021_MW030	0021_MW030_211021	21 Oct 2021	ES2138639	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW030	0021_MW030_220406	06 Apr 2022	ES2212442	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW030	0021_MW030_221014	14 Oct 2022	ES2237106	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW030	0021_MW030_230419	19 Apr 2023	ES2313364	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW030	0021_MW030_231018	18 Oct 2023	ES2336398	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW030	0021_MW030_240410	10 Apr 2024	ES2411994	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW030	0021_MW030_241024	24 Oct 2024	ES2435541	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW030	0021_MW030_250403	03 Apr 2025	ES2510113	0.04	0.02	<0.01	0.06	0.06	0.06	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW030	0021_QC255_250403	03 Apr 2025	1210052	<0.01	<0.01	<0.01	<0.1	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Captains Lagoon	Source	0021_MW030	0021_MW030_251022	22 Oct 2025	ES2533521	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW062	0021_MW062_210621	21 Jun 2021	ES2123994	456	36.2	3.26	517	492	511	-	-	1.90	0.06	-	3.21	-
Captains Lagoon	Source	0021_MW062	0021_QC113_210621	21 Jun 2021	ES2123994	435	37.4	3.22	499	472	493	-	-	1.83	0.05	-	3.46	-
Captains Lagoon	Source	0021_MW062	0021_MW062_240411	11 Apr 2024	ES2411994	78.4	18.5	1.37	109	96.9	106	-	-	0.98	0.11	-	1.22	-
Captains Lagoon	Source	0021_MW062	0021_MW062_241024	24 Oct 2024	ES2435541	60.0	12.4	1.25	83.1	72.4	80.8	-	-	0.80	0.07	-	0.84	-
Captains Lagoon	Source	0021_MW062	0021_QC157_241025	25 Oct 2024	ES2435541	46.2	10.1	1.11	67.0	56.3	63.5	-	-	0.66	0.10	-	1.53	-
Captains Lagoon	Source	0021_MW062	0021_MW062_250129	29 Jan 2025	ES2503552	57.9	16.8	1.35	87.4	74.7	83.3	-	-	0.84	0.12	0.66	1.61	0.31
Captains Lagoon	Source	0021_MW062	0021_MW062_250424	24 Apr 2025	ES2512435	0.63	0.19	<0.01	0.82	0.82	0.82	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW062	0021_MW062_251022	22 Oct 2025	ES2533521	38.9	11.0	0.88	57.1	49.9	54.8	-	-	0.40	0.08	-	0.93	-
Captains Lagoon	Source	0021_MW102	A_MW02	01 May 2017	ES1710866	0.243	6.06	0.844	12.1	6.30	9.98	-	-	1.27	<0.0005	-	0.796	-
Captains Lagoon	Source	0021_MW102	0021_MW102_211019	19 Oct 2021	ES2138639	7.07	3.82	0.23	13.8	10.9	13.0	-	-	0.31	<0.02	-	0.47	-
Captains Lagoon	Source	0021_MW102	0021_QC201_211019	19 Oct 2021	281322	8.8	3.9	0.26	16	13	-	9.0	-	0.33	<0.02	-	0.58	-
Captains Lagoon	Source	0021_MW102	0021_MW102_220405	05 Apr 2022	ES2212442	13.9	5.31	0.37	23.4	19.2	22.0	-	-	0.67	<0.02	-	0.76	-
Captains Lagoon	Source	0021_MW102	0021_MW102_221013	13 Oct 2022	ES2237106	8.00	2.29	0.16	11.8	10.3	11.3	-	-	0.17	<0.02	-	0.27	-
Captains Lagoon	Source	0021_MW102	0021_MW102_230420	20 Apr 2023	ES2313364	10.3	5.98	0.45	20.8	16.3	19.5	-	-	0.49	<0.02	-	0.62	-
Captains Lagoon	Source	0021_MW102	0021_QC109_230420	20 Apr 2023	ES2313364	6.16	3.16	0.24	11.7	9.32	10.8	-	-	0.20	<0.02	-	0.35	-
Captains Lagoon	Source	0021_MW102	0021_QC209_230420	20 Apr 2023	321517	6.8	4.6	0.30	15	11	-	7.1	-	0.31	<0.02	-	0.46	-
Captains Lagoon	Source	0021_MW102	0021_MW102_231019	19 Oct 2023	ES2336398	10.2	3.17	0.32	16.2	13.4	15.6	-	-	0.29	<0.02	-	0.40	-
Captains Lagoon	Source	0021_MW102	0021_MW102_240410	10 Apr 2024	ES2411994	5.73	3.19	0.25	11.6	8.92	10.8	-	-	0.31	<0.02	-	0.34	-
Captains Lagoon	Source	0021_MW102	0021_MW102_241024	24 Oct 2024	ES2435541	3.34	4.48	0.38	11.6	7.82	10.6	-	-	0.48	<0.02	-	0.37	-
Captains Lagoon	Source	0021_MW102	0021_MW102_250404	04 Apr 2025	ES2510113	5.64	2.99	0.17	11.3	8.63	10.5	-	-	0.35	<0.02	-	0.26	-
Captains Lagoon	Source	0021_MW102	0021_MW102_251022	22 Oct 2025	ES2533521	7.98	5.70	0.36	17.6	13.7	16.3	-	-	0.47	<0.02	-	0.50	-



Appendix B
Table B5b
Historical Water Analytical Results - Captains Lagoon

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids				
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Sum of US EPA PFAS (PFOS + PFOA)*	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecane sulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPrS)
	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	0.0001	0.0005	0.0005	0.0003	0.0003	0.0003	0.01	0.01	0.0005	0.0005	0.01	0.0005	0.01
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13		220										
PFAS NEMP 3.0 2025 Recreational water quality	2	2	10		2								

Catchment	SPR	Location	Field ID	Date	Lab Report No.													
Captains Lagoon	Source	0021_MW109	A_MW09	08 May 2017	ES1711220	0.114	0.278	0.0048	0.411	0.392	0.4	-	-	0.0014	<0.0005	-	0.0076	-
Captains Lagoon	Source	0021_MW109	0021_MW109_211019	19 Oct 2021	ES2138639	2.04	1.45	0.06	4.24	3.49	4.10	-	-	0.06	<0.02	-	0.03	-
Captains Lagoon	Source	0021_MW109	0021_MW109_220406	06 Apr 2022	ES2212442	1.07	1.14	0.04	2.74	2.21	2.62	-	-	0.06	<0.02	-	0.03	-
Captains Lagoon	Source	0021_MW109	0021_MW109_221013	13 Oct 2022	ES2237106	1.49	0.75	0.03	2.49	2.24	2.42	-	-	<0.02	<0.02	-	0.03	-
Captains Lagoon	Source	0021_MW109	0021_QC209_221013	13 Oct 2022	308187	1.2	0.66	0.03	2.2	1.9	-	1.3	-	0.01	<0.02	-	0.03	-
Captains Lagoon	Source	0021_MW109	0021_MW109_230420	20 Apr 2023	ES2313364	1.48	1.29	0.04	3.32	2.77	3.19	-	-	0.05	<0.02	-	0.04	-
Captains Lagoon	Source	0021_MW109	0021_MW109_231018	18 Oct 2023	ES2336398	1.01	1.08	0.04	2.65	2.09	2.55	-	-	0.05	<0.02	-	0.03	-
Captains Lagoon	Source	0021_MW109	0021_MW109_240410	10 Apr 2024	ES2411994	1.48	0.67	0.03	2.52	2.15	2.45	-	-	0.04	<0.02	-	0.02	-
Captains Lagoon	Source	0021_MW109	0021_MW109_241024	24 Oct 2024	ES2435541	0.71	0.45	0.02	1.34	1.16	1.32	-	-	0.03	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW109	0021_QC256_241024	24 Oct 2024	1156146	0.92	0.65	0.02	1.83	1.57	1.77	0.94	1.59	0.03	<0.01	<0.01	0.02	<0.01
Captains Lagoon	Source	0021_MW109	0021_MW109_250131	31 Jan 2025	ES2503552	0.74	0.73	0.02	1.67	1.47	1.62	-	-	0.03	<0.02	<0.02	<0.02	<0.02
Captains Lagoon	Source	0021_MW109	0021_MW109_250403	03 Apr 2025	ES2510113	1.78	0.94	0.04	3.25	2.72	3.14	-	-	0.05	<0.02	-	0.04	-
Captains Lagoon	Source	0021_MW109	0021_MW109_251022	22 Oct 2025	ES2533521	0.64	0.64	0.02	1.54	1.28	1.48	-	-	0.03	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW119	C_MW03	03 May 2017	ES1710866	<0.0003	0.0006	<0.0005	0.0006	0.0006	0.0006	-	-	<0.0005	<0.0005	-	<0.0005	-
Captains Lagoon	Source	0021_MW119	0021_MW119_211020	20 Oct 2021	ES2138639	0.02	<0.01	<0.01	0.02	0.02	0.02	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW119	0021_QC202_211020	20 Oct 2021	281322	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.01	<0.02	-	<0.01	-
Captains Lagoon	Source	0021_MW119	0021_MW119_220406	06 Apr 2022	ES2212442	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW119	0021_MW119_221011	11 Oct 2022	ES2237106	0.01	<0.01	<0.01	0.01	0.01	0.01	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW119	0021_MW119_230203	03 Feb 2023	ES2303695	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW119	0021_MW119_230421	21 Apr 2023	ES2313364	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW119	0021_MW119_231019	19 Oct 2023	ES2336398	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW119	0021_MW119_240412	12 Apr 2024	ES2411994	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW119	0021_MW119_241022	22 Oct 2024	ES2435078	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW119	0021_MW119_250402	02 Apr 2025	ES2510113	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW119	0021_MW119_251021	21 Oct 2025	ES2533521	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW120	C_MW04	03 May 2017	ES1710866	0.0092	0.221	0.0027	0.416	0.230	0.343	-	-	0.0591	<0.0005	-	0.0026	-
Captains Lagoon	Source	0021_MW120	0021_MW120_211020	20 Oct 2021	ES2138639	0.48	0.61	0.01	1.34	1.09	1.28	-	-	0.06	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW120	0021_QC102_211020	20 Oct 2021	ES2138639	0.46	0.64	0.01	1.34	1.10	1.28	-	-	0.05	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW120	0021_MW120_221014	14 Oct 2022	ES2237106	0.22	0.24	<0.01	0.56	0.46	0.52	-	-	0.03	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW120	0021_MW120_230421	21 Apr 2023	ES2313364	0.91	2.02	0.03	3.95	2.93	3.61	-	-	0.14	<0.02	-	0.04	-
Captains Lagoon	Source	0021_MW120	0021_MW120_231019	19 Oct 2023	ES2336398	1.66	2.77	0.07	5.40	4.43	5.09	-	-	0.14	<0.02	-	0.09	-
Captains Lagoon	Source	0021_MW120	0021_MW120_240412	12 Apr 2024	ES2411994	0.43	0.89	0.02	1.92	1.32	1.71	-	-	0.14	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW120	0021_MW120_241022	22 Oct 2024	ES2435078	0.47	1.31	0.04	2.43	1.78	2.18	-	-	0.09	<0.02	-	0.04	-
Captains Lagoon	Source	0021_MW120	0021_MW120_250402	02 Apr 2025	ES2510113	1.08	2.00	0.05	3.79	3.08	3.50	-	-	0.11	<0.02	-	0.07	-
Captains Lagoon	Source	0021_MW120	0021_MW120_251021	21 Oct 2025	ES2533521	0.26	0.52	0.01	1.02	0.78	0.92	-	-	0.06	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW121	C_MW05	03 May 2017	ES1710866	0.0102	0.118	0.0015	0.170	0.128	0.152	-	-	0.0142	<0.0005	-	0.0019	-
Captains Lagoon	Source	0021_MW121	0021_MW121_211022	22 Oct 2021	ES2138639	0.02	0.02	<0.01	0.04	0.04	0.04	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW121	0021_MW121_221014	14 Oct 2022	ES2237106	0.04	0.30	<0.01	0.39	0.34	0.37	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW121	0021_MW121_230201	01 Feb 2023	ES2303446	0.06	0.28	<0.01	0.40	0.34	0.38	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW121	0021_QC202_230201	01 Feb 2023	961655	0.06 ^{#1}	0.25 ^{#1}	<0.01	0.4	0.31	0.38	0.06	0.31	0.02	<0.01	<0.01	<0.01	<0.01
Captains Lagoon	Source	0021_MW121	0021_MW121_230420	20 Apr 2023	ES2313364	0.05	0.14	<0.01	0.19	0.19	0.19	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW121	0021_MW121_231018	18 Oct 2023	ES2336398	0.02	0.10	<0.01	0.12	0.12	0.12	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW121	0021_QC112_231018	18 Oct 2023	ES2336399	0.02	0.09	<0.01	0.11	0.11	0.11	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW121	0021_QC212_231018	18 Oct 2023	335876	0.03	0.05	<0.01	0.19	0.08	-	0.03	-	<0.01	<0.02	-	<0.01	-
Captains Lagoon	Source	0021_MW121	0021_MW121_240410	10 Apr 2024	ES2411994	0.02	0.02	<0.01	0.04	0.04	0.04	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW121	0021_QC111_240410	10 Apr 2024	ES2411994	0.03	0.03	<0.01	0.06	0.06	0.06	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW121	0021_QC211_240410	10 Apr 2024	348825	0.02	0.02	<0.01	0.05	0.05	-	0.02	-	<0.01	<0.02	-	<0.01	-
Captains Lagoon	Source	0021_MW121	0021_MW121_241024	24 Oct 2024	ES2435541	0.02	0.15	<0.01	0.17	0.17	0.17	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW121	0021_MW121_250402	02 Apr 2025	ES2510113	0.02	0.10	<0.01	0.12	0.12	0.12	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW121	0021_MW121_251022	22 Oct 2025	ES2533521	0.03	0.48	<0.01	0.61	0.51	0.57	-	-	0.03	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW123	C_MW07	08 May 2017	ES1711220	0.227	2.8	0.0697	4.62	3.03	4.06	-	-	0.322	<0.0005	-	0.0724	-



Appendix B
Table B5b
Historical Water Analytical Results - Captains Lagoon

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids				
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Sum of US EPA PFAS (PFOS + PFOA)*	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPrS)
	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	0.0001	0.0005	0.0005	0.0003	0.0003	0.0003	0.01	0.01	0.0005	0.0005	0.01	0.0005	0.01
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13		220										
PFAS NEMP 3.0 2025 Recreational water quality	2	2	10		2								

Catchment	SPR	Location	Field ID	Date	Lab Report No.													
Captains Lagoon	Source	0021_MW123	0021_MW123_211026	26 Oct 2021	ES2138639	0.41	1.70	0.10	3.10	2.11	2.64	-	-	0.12	<0.02	-	0.21	-
Captains Lagoon	Source	0021_MW123	0021_MW123_220406	06 Apr 2022	ES2212442	0.27	0.55	0.04	1.14	0.82	1.01	-	-	0.05	<0.02	-	0.06	-
Captains Lagoon	Source	0021_MW123	0021_MW123_221014	14 Oct 2022	ES2237106	0.85	0.99	0.06	2.44	1.84	2.16	-	-	0.07	<0.02	-	0.13	-
Captains Lagoon	Source	0021_MW123	0021_MW123_230421	21 Apr 2023	ES2313364	1.07	1.28	0.08	3.16	2.35	2.81	-	-	0.10	<0.02	-	0.15	-
Captains Lagoon	Source	0021_MW123	0021_MW123_231019	19 Oct 2023	ES2336398	0.63	1.35	0.09	2.79	1.98	2.48	-	-	0.10	<0.02	-	0.12	-
Captains Lagoon	Source	0021_MW123	0021_MW123_240412	12 Apr 2024	ES2411994	1.02	1.17	0.10	2.90	2.19	2.60	-	-	0.07	<0.02	-	0.12	-
Captains Lagoon	Source	0021_MW123	0021_MW123_241022	22 Oct 2024	ES2435078	0.82	0.99	0.08	2.54	1.81	2.23	-	-	0.08	<0.02	-	0.12	-
Captains Lagoon	Source	0021_MW123	0021_MW123_250402	02 Apr 2025	ES2510113	0.70	1.03	0.07	2.30	1.73	2.06	-	-	0.06	<0.02	-	0.11	-
Captains Lagoon	Source	0021_MW123	0021_MW123_251021	21 Oct 2025	ES2533521	0.89	0.73	0.07	2.08	1.62	1.87	-	-	0.04	<0.02	-	0.11	-
Captains Lagoon	Source	0021_MW127	FC_MW03	04 May 2017	ES1711220	0.198	0.328	0.013	0.657	0.526	0.6	-	-	0.03	<0.0005	-	0.0179	-
Captains Lagoon	Source	0021_MW127	0021_MW127_220411	11 Apr 2022	ES2213156	0.34	0.39	0.01	0.92	0.73	0.86	-	-	0.06	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW127	0021_MW127_221011	11 Oct 2022	ES2236834	0.22	0.31	0.01	0.70	0.53	0.65	-	-	0.05	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW127	0021_QC225_221012	11 Oct 2022	931500	0.27 ^{#1}	0.32 ^{#1}	0.01 ^{#1}	0.81	0.59	0.73	0.28	0.6	0.06	<0.01	-	0.01	0.02
Captains Lagoon	Source	0021_MW127	0021_MW127_230201	01 Feb 2023	ES2303446	0.23	0.37	0.01	0.78	0.60	0.72	-	-	0.05	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW127	0021_QC102_230201	01 Feb 2023	ES2303446	0.21	0.30	0.01	0.66	0.51	0.61	-	-	0.04	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW127	0021_MW127_241024	24 Oct 2024	ES2435541	0.25	0.42	0.02	0.88	0.67	0.82	-	-	0.05	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_MW127	0021_MW127_250402	02 Apr 2025	ES2510113	0.64	0.73	0.03	1.75	1.37	1.61	-	-	0.07	<0.02	-	0.03	-
Captains Lagoon	Source	0021_MW127	0021_MW127_251022	22 Oct 2025	ES2533521	0.22	0.40	0.02	0.83	0.62	0.77	-	-	0.05	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_SW001	AB_SW01	20 Apr 2017	ES1709644	2.97	3.33	0.102	7.89	6.30	7.66	-	-	0.264	0.0031	-	0.122	-
Captains Lagoon	Source	0021_SW001	0021_QC101_211019	19 Oct 2021	ES2138639	13.1	10.5	0.41	30.9	23.6	29.0	-	-	0.56	0.11	-	0.53	-
Captains Lagoon	Source	0021_SW001	0021_SW001_211019	19 Oct 2021	ES2138639	12.4	9.80	0.43	29.5	22.2	27.5	-	-	0.52	0.10	-	0.58	-
Captains Lagoon	Source	0021_SW001	0021_QC101_220405	05 Apr 2022	ES2212442	3.71	2.79	0.14	8.37	6.50	8.04	-	-	0.20	<0.02	-	0.12	-
Captains Lagoon	Source	0021_SW001	0021_SW001_220405	05 Apr 2022	ES2212442	3.48	2.24	0.12	7.32	5.72	7.04	-	-	0.20	<0.02	-	0.09	-
Captains Lagoon	Source	0021_SW001	0021_QC101_220707	07 Jul 2022	ES2224473	7.77	3.38	0.15	12.7	11.2	12.2	-	-	0.14	0.04	-	0.16	-
Captains Lagoon	Source	0021_SW001	0021_QC201_220707	07 Jul 2022	905309	9.0 ^{#1}	3.8 ^{#1}	0.15 ^{#1}	14.23	12.8	13.86	9.15	12.95	0.13	<0.01	-	0.10 ^{#1}	0.04
Captains Lagoon	Source	0021_SW001	0021_SW001_220101	07 Jul 2022	ES2224473	7.68	4.03	0.17	13.4	11.7	13.0	-	-	0.15	0.03	-	0.18	-
Captains Lagoon	Source	0021_SW001	0021_SW001_221011	11 Oct 2022	ES2236834	3.60	1.13	0.07	5.38	4.73	5.19	-	-	0.07	<0.02	-	0.09	-
Captains Lagoon	Source	0021_SW001	0021_SW001_221013	13 Oct 2022	ES2237106	4.91	2.41	0.12	8.54	7.32	8.23	-	-	0.12	<0.02	-	0.12	-
Captains Lagoon	Source	0021_SW001	0021_SW001_230201	01 Feb 2023	ES2303446	4.27	2.02	0.10	7.34	6.29	7.05	-	-	0.11	0.02	-	0.11	-
Captains Lagoon	Source	0021_SW001	0021_SW001_230420	20 Apr 2023	ES2313364	9.25	6.39	0.23	18.6	15.6	17.9	-	-	0.36	0.03	-	0.21	-
Captains Lagoon	Source	0021_SW001	0021_SW001_230807	07 Aug 2023	ES2326593	1.16	0.40	0.02	1.81	1.56	1.75	-	-	0.02	<0.02	-	0.03	-
Captains Lagoon	Source	0021_SW001	0021_SW001_231004	04 Oct 2023	ES2334226	1.85	0.74	0.05	3.18	2.59	3.09	-	-	0.03	<0.02	-	0.05	-
Captains Lagoon	Source	0021_SW001	0021_SW001_231018	18 Oct 2023	ES2336399	2.07	1.19	0.05	3.92	3.26	3.79	-	-	0.06	<0.02	-	0.05	-
Captains Lagoon	Source	0021_SW001	0021_SW001_240410	10 Apr 2024	ES2412012	2.84	1.96	0.08	5.77	4.80	5.48	-	-	0.10	<0.02	-	0.07	-
Captains Lagoon	Source	0021_SW001	0021_SW001_250403	03 Apr 2025	ES2510622	3.08	8.35	0.24	15.2	11.4	14.2	-	-	0.39	<0.02	-	0.18	-
Captains Lagoon	Source	0021_SW001	0021_SW001_250526	26 May 2025	ES2516045	4.06	1.83	0.10	6.79	5.89	6.53	-	-	0.06	0.02	-	0.08	-
Captains Lagoon	Source	0021_SW001	0021_QC101_250707	07 Jul 2025	ES2520608	4.30	1.66	0.08	6.73	5.96	6.46	-	-	0.06	0.03	-	0.10	-
Captains Lagoon	Source	0021_SW001	0021_QC201_250707	07 Jul 2025	1242260	5.9 ^{#1}	1.8 ^{#1}	0.08 ^{#1}	8.49	7.7	8.22	-	-	0.06	0.02	0.05	0.10 ^{#1}	0.01
Captains Lagoon	Source	0021_SW001	0021_SW001_250707	07 Jul 2025	ES2520608	4.28	1.42	0.08	6.44	5.70	6.20	-	-	0.05	<0.02	-	0.09	-
Captains Lagoon	Source	0021_SW001	0021_SW001_250805	05 Aug 2025	ES2524252	2.60	1.71	0.06	4.96	4.31	4.78	-	-	0.07	<0.02	-	0.06	-
Captains Lagoon	Source	0021_SW027	FC_SW11	19 Apr 2017	ES1709535	0.0769	0.0628	0.0037	0.179	0.14	0.169	-	-	0.0137	<0.0005	-	0.0026	-
Captains Lagoon	Source	0021_SW027	0021_SW027_211021	21 Oct 2021	ES2138639	0.15	0.08	<0.01	0.23	0.23	0.23	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_SW027	0021_SW027_220406	06 Apr 2022	ES2212442	0.03	0.02	<0.01	0.05	0.05	0.05	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_SW027	0021_SW027_221012	12 Oct 2022	ES2237106	0.17	0.12	<0.01	0.32	0.29	0.32	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_SW027	0021_SW027_230420	20 Apr 2023	ES2313364	0.17	0.54	<0.01	0.92	0.71	0.83	-	-	0.06	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_SW027	0021_SW027_240410	10 Apr 2024	ES2412012	0.13	0.09	<0.01	0.22	0.22	0.22	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Source	0021_SW027	0021_SW027_250401	01 Apr 2025	ES2510622	0.14	0.09	<0.01	0.23	0.23	0.23	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW012A	0020_MW12_180410	10 Apr 2018	ES1810721	3.93	1.30	0.0627	5.88	5.23	5.58	-	-	0.0508	<0.0005	-	0.149	-
Captains Lagoon	Pathway	0020_MW012A	0020_MW12_180503	03 May 2018	ES1812871	4.00	1.30	0.06	5.80	5.30	5.65	-	-	0.05	<0.02	-	0.06	-
Captains Lagoon	Pathway	0020_MW012A	0020_MW012_211015	15 Oct 2021	ES2138638	4.30	1.54	0.07	6.39	5.84	6.20	-	-	0.07	<0.02	-	0.08	-
Captains Lagoon	Pathway	0020_MW012A	0020_MW012_220404	04 Apr 2022	ES2212597	3.46	0.63	0.07	4.50	4.09	4.44	-	-	0.02	<0.02	-	0.04	-



Appendix B
Table B5b
Historical Water Analytical Results - Captains Lagoon

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids				
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Sum of US EPA PFAS (PFOS + PFOA)*	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPrS)
	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	0.0001	0.0005	0.0005	0.0003	0.0003	0.0003	0.01	0.01	0.0005	0.0005	0.01	0.0005	0.01
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13		220										
PFAS NEMP 3.0 2025 Recreational water quality	2	2	10		2								

Catchment	SPR	Location	Field ID	Date	Lab Report No.													
Captains Lagoon	Pathway	0020_MW012A	0020_MW012_221010	10 Oct 2022	ES2237104	4.04	1.07	0.09	5.65	5.11	5.52	-	-	0.04	<0.02	-	0.08	-
Captains Lagoon	Pathway	0020_MW012A	0020_MW012A_230130	30 Jan 2023	ES2303447	5.56	1.41	0.11	7.59	6.97	7.41	-	-	0.04	<0.02	-	0.11	-
Captains Lagoon	Pathway	0020_MW012A	0020_MW012_250408	08 Apr 2025	ES2510618	3.41	1.16	0.05	4.89	4.57	4.77	-	-	0.03	<0.02	-	0.06	-
Captains Lagoon	Pathway	0020_MW012A	0020_MW012A_251020	20 Oct 2025	ES2533546	3.27	0.94	0.06	4.62	4.21	4.49	-	-	0.03	<0.02	-	0.08	-
Captains Lagoon	Pathway	0020_MW055	0020_MW055_220412	12 Apr 2022	ES2213152	0.07	0.33	<0.01	0.47	0.40	0.47	-	-	0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW055	0020_MW055_221010	10 Oct 2022	ES2236866	0.13	0.08	<0.01	0.21	0.21	0.21	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW055	0020_MW055_230131	31 Jan 2023	ES2303447	0.08	0.07	<0.01	0.15	0.15	0.15	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW055	0020_MW055_251020	20 Oct 2025	ES2533546	0.04	0.06	<0.01	0.10	0.10	0.10	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW055	0020_QC122_251020	20 Oct 2025	ES2533546	0.05	0.05	<0.01	0.10	0.10	0.10	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW055	0020_QC222_251020	20 Oct 2025	1285219	0.05 ^{#1}	0.06 ^{#1}	<0.01	0.1	0.11	0.11	-	-	<0.01	<0.01	<0.01	<0.01	<0.01
Captains Lagoon	Pathway	0020_MW056	0020_MW056_220412	12 Apr 2022	ES2213152	0.99	0.18	0.02	1.27	1.17	1.27	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW056	0020_MW056_221010	10 Oct 2022	ES2236866	1.17	0.22	<0.01	1.41	1.39	1.41	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW056	0020_QC122_221010	10 Oct 2022	ES2236866	1.19	0.21	<0.01	1.42	1.40	1.42	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW056	0020_MW056_230130	30 Jan 2023	ES2303447	0.20	0.11	<0.01	0.33	0.31	0.33	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW056	0020_MW056_241021	21 Oct 2024	ES2435143	0.18	0.11	<0.01	0.29	0.29	0.29	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW056	0020_MW056_251020	20 Oct 2025	ES2533546	0.82	0.09	0.02	0.97	0.91	0.97	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW057	0020_MW057_220412	12 Apr 2022	ES2213152	1.43	0.25	0.03	1.95	1.68	1.95	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW057	0020_MW057_221010	10 Oct 2022	ES2236866	1.27	0.29	0.03	1.72	1.56	1.72	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW057	0020_MW057_230130	30 Jan 2023	ES2303447	0.88	0.24	0.01	1.25	1.12	1.25	-	-	0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW057	0020_MW057_241021	21 Oct 2024	ES2435143	0.87	0.22	0.01	1.12	1.09	1.10	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW057	0020_MW057_250331	31 Mar 2025	ES2510618	0.54	0.44	<0.01	1.00	0.98	0.98	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW057	0020_MW057_251020	20 Oct 2025	ES2533546	0.56	0.19	0.01	0.80	0.75	0.80	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW058	0020_MW058_220412	12 Apr 2022	ES2213152	7.30	1.59	0.20	9.74	8.89	9.49	-	-	0.03	<0.02	-	0.20	-
Captains Lagoon	Pathway	0020_MW058	0020_QC201_220412	12 Apr 2022	880529	8.0	1.5	0.19	10.29	9.5	10	8.19	9.69	0.02	<0.01	-	0.21	<0.01
Captains Lagoon	Pathway	0020_MW058	0020_MW058_221010	10 Oct 2022	ES2236866	5.00	0.52	0.07	5.70	5.52	5.65	-	-	<0.02	<0.02	-	0.03	-
Captains Lagoon	Pathway	0020_MW058	0020_QC222_221010	10 Oct 2022	931497	4.4 ^{#1}	0.45 ^{#1}	0.06 ^{#1}	5.1	4.85	4.99	4.46	4.91	0.01	<0.01	-	0.04	<0.01
Captains Lagoon	Pathway	0020_MW058	0020_MW058_230130	30 Jan 2023	ES2303447	5.70	1.05	0.19	7.36	6.75	7.24	-	-	0.03	<0.02	-	0.08	-
Captains Lagoon	Pathway	0020_MW058	0020_QC200_230130	30 Jan 2023	961653	6.0 ^{#1}	1.3 ^{#1}	0.18 ^{#1}	8.02	7.3	7.79	6.18	7.48	0.03	<0.01	0.05	0.12 ^{#1}	<0.01
Captains Lagoon	Pathway	0020_MW058	0020_MW058_241021	21 Oct 2024	ES2435143	4.48	1.35	0.16	6.39	5.83	6.23	-	-	0.02	<0.02	-	0.07	-
Captains Lagoon	Pathway	0020_MW058	0020_MW058_250403	03 Apr 2025	ES2510618	2.49	0.57	0.05	3.17	3.06	3.13	-	-	<0.02	<0.02	-	0.02	-
Captains Lagoon	Pathway	0020_MW058	0020_QC137_250403	03 Apr 2025	ES2510618	2.56	0.57	0.05	3.23	3.13	3.20	-	-	<0.02	<0.02	-	0.03	-
Captains Lagoon	Pathway	0020_MW058	0020_QC237_250403	03 Apr 2025	1209674	2.7	0.51	0.06	3.41	3.21	3.33	2.76	3.27	0.01	<0.01	0.02	0.03	<0.01
Captains Lagoon	Pathway	0020_MW058	0020_MW058_251020	20 Oct 2025	ES2533546	1.06	0.17	0.02	1.27	1.23	1.27	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW059	0020_MW059_220412	12 Apr 2022	ES2213152	0.12	0.49	<0.01	0.71	0.61	0.68	-	-	0.03	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW059	0020_MW059_221010	10 Oct 2022	ES2236866	0.18	0.60	<0.01	0.90	0.78	0.86	-	-	0.04	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW059	0020_MW059_230130	30 Jan 2023	ES2303447	1.28	0.66	0.05	2.25	1.94	2.18	-	-	0.03	<0.02	-	0.04	-
Captains Lagoon	Pathway	0020_MW059	0020_QC100_230130	30 Jan 2023	ES2303447	1.07	0.58	0.04	1.92	1.65	1.85	-	-	0.02	<0.02	-	0.04	-
Captains Lagoon	Pathway	0020_MW059	0020_MW059_241021	21 Oct 2024	ES2435143	1.46	0.31	0.03	1.87	1.77	1.82	-	-	<0.02	<0.02	-	0.03	-
Captains Lagoon	Pathway	0020_MW059	0020_MW059_250331	31 Mar 2025	ES2510618	0.44	0.53	<0.01	1.01	0.97	0.99	-	-	0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW059	0020_MW059_251020	20 Oct 2025	ES2533546	0.67	0.40	0.02	1.15	1.07	1.13	-	-	<0.02	<0.02	-	0.02	-
Captains Lagoon	Pathway	0020_MW070	0020_MW070_250424	24 Apr 2025	ES2512752	0.50	0.15	<0.01	0.65	0.65	0.65	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW070	0020_QC120_250424	24 Apr 2025	ES2512752	0.49	0.13	<0.01	0.62	0.62	0.62	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW070	0020_MW070_251020	20 Oct 2025	ES2533546	0.34	0.08	<0.01	0.44	0.42	0.44	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW070	0020_QC121_251020	20 Oct 2025	ES2533546	0.41	0.08	<0.01	0.51	0.49	0.51	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW070	0020_QC221_251020	20 Oct 2025	1285219	0.43 ^{#1}	0.07 ^{#1}	<0.01	0.5	0.5	0.52	-	-	<0.01	<0.01	<0.01	0.02 ^{#1}	<0.01
Captains Lagoon	Pathway	0020_MW071	0020_MW071_250424	24 Apr 2025	ES2512752	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW071	0020_MW071_251020	20 Oct 2025	ES2533546	<0.01	0.02	<0.01	0.02	0.02	0.02	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW102D	CL_MW02_180410	10 Apr 2018	ES1810721	0.0280	0.0882	0.0034	0.154	0.116	0.143	-	-	0.0124	<0.0020 ^{#2}	-	<0.0020 ^{#2}	-
Captains Lagoon	Pathway	0020_MW102D	CL_QC211_180410	10 Apr 2018	594255	<0.0001	<0.001	<0.001	<0.005	<0.001	<0.005	-	-	<0.001	<0.001	-	<0.001	-
Captains Lagoon	Pathway	0020_MW102D	CL_MW02_180502	02 May 2018	ES1812871	0.05	0.10	<0.01	0.22	0.15	0.20	-	-	0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW102D	0020_MW102_211018	18 Oct 2021	ES2138638	0.09	0.21	<0.01	0.39	0.30	0.36	-	-	0.03	<0.02	-	<0.02	-



Appendix B
Table B5b
Historical Water Analytical Results - Captains Lagoon

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids				
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Sum of US EPA PFAS (PFOS + PFOA)*	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPrS)
	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	0.0001	0.0005	0.0005	0.0003	0.0003	0.0003	0.01	0.01	0.0005	0.0005	0.01	0.0005	0.01
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13		220										
PFAS NEMP 3.0 2025 Recreational water quality	2	2	10		2								

Catchment	SPR	Location	Field ID	Date	Lab Report No.													
Captains Lagoon	Pathway	0020_MW102D	0020_MW102_220404	04 Apr 2022	ES2212597	0.14	0.30	<0.01	0.59	0.44	0.55	-	-	0.06	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW102D	0020_MW102_221010	10 Oct 2022	ES2237104	0.16	0.17	<0.01	0.36	0.33	0.36	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW102D	0020_QC201_221010	10 Oct 2022	308190	0.15	0.18	<0.01	0.39	0.33	-	0.15	-	0.02	<0.02	-	<0.01	-
Captains Lagoon	Pathway	0020_MW102D	0020_MW102D_230417	17 Apr 2023	ES2313254	0.27	0.22	<0.01	0.59	0.49	0.56	-	-	0.03	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW102D	0020_MW102D_231016	16 Oct 2023	ES2336397	0.11	0.14	<0.01	0.27	0.25	0.27	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW102D	0020_QC100_231016	16 Oct 2023	ES2336397	0.14	0.17	<0.01	0.33	0.31	0.33	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW102D	0020_QC200_231016	16 Oct 2023	335710	0.11	0.18	<0.01	0.37	0.29	-	0.11	-	0.02	<0.02	-	<0.01	-
Captains Lagoon	Pathway	0020_MW102D	0020_MW102D_240408	08 Apr 2024	ES2411964	1.16	0.43	0.02	1.93	1.59	1.85	-	-	0.02	<0.02	-	0.06	-
Captains Lagoon	Pathway	0020_MW102D	0020_MW102D_241022	22 Oct 2024	ES2435143	0.12	0.18	<0.01	0.34	0.30	0.32	-	-	0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW102D	0020_QC253_241022	22 Oct 2024	1154740	0.16	0.23	<0.01	0.48	0.39	0.44	0.16	0.39	0.03	<0.01	<0.01	<0.01	0.01
Captains Lagoon	Pathway	0020_MW102D	0020_MW102D_250331	31 Mar 2025	ES2510618	0.12	0.23	<0.01	0.39	0.35	0.37	-	-	0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW102D	0020_MW102D_251020	20 Oct 2025	ES2533546	0.12	0.16	<0.01	0.34	0.28	0.32	-	-	0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW102S	0020_MW102S_241022	22 Oct 2024	ES2435143	0.09	0.16	<0.01	0.27	0.25	0.27	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW102S	0020_MW102S_250331	31 Mar 2025	ES2510618	0.04	0.05	<0.01	0.09	0.09	0.09	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW102S	0020_MW102S_251020	20 Oct 2025	ES2533546	0.12	0.08	<0.01	0.20	0.20	0.20	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW104	CL_MW04_180410	10 Apr 2018	ES1810721	<0.0003	0.0062	<0.0005	0.0070	0.0062	0.0062	-	-	<0.0005	<0.0005	-	<0.0005	-
Captains Lagoon	Pathway	0020_MW104	0020_MW104_241022	22 Oct 2024	ES2435143	<0.01	0.01	<0.01	0.01	0.01	0.01	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW104	0020_QC153_241022	22 Oct 2024	ES2435143	<0.01	0.01	<0.01	0.01	0.01	0.01	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW104	0020_MW104_250403	03 Apr 2025	ES2510618	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW104	0020_QC138_250403	03 Apr 2025	ES2510618	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_MW104	0020_QC238_250403	03 Apr 2025	1209674	<0.01	<0.01	<0.01	<0.1	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Captains Lagoon	Pathway	0020_MW104	0020_MW104_251020	20 Oct 2025	ES2533546	0.01	0.01	<0.01	0.02	0.02	0.02	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_SW011	CL_SW08	18 Apr 2017	ES1709535	0.14	0.187	0.0033	0.379	0.327	0.359	-	-	0.0138	<0.0005	-	0.0034	-
Captains Lagoon	Pathway	0020_SW011	JCQA02	18 Apr 2017	ES1709535	0.165	0.176	0.0031	0.39	0.341	0.37	-	-	0.013	<0.0005	-	0.0033	-
Captains Lagoon	Pathway	0020_SW011	CL_SW08_180501	01 May 2018	ES1812871	0.263	0.405	0.0107	0.801	0.668	0.743	-	-	0.0399	0.0008	-	0.0139	-
Captains Lagoon	Pathway	0020_SW011	0020_SW011_211021	21 Oct 2021	ES2138638	0.32	0.38	0.01	0.81	0.70	0.78	-	-	0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_SW011	0020_SW011_220404	04 Apr 2022	ES2212597	0.17	0.16	<0.01	0.35	0.33	0.35	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_SW011	0020_SW011_220707	07 Jul 2022	ES2224472	0.16	0.13	<0.01	0.29	0.29	0.29	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_SW011	0020_SW011_221012	10 Oct 2022	ES2236866	0.18	0.17	<0.01	0.38	0.35	0.38	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_SW011	0020_SW011_221012	12 Oct 2022	ES2237104	0.13	0.14	<0.01	0.29	0.27	0.29	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_SW011	0020_SW011_230201	01 Feb 2023	ES2303447	0.25	0.37	<0.01	0.67	0.62	0.64	-	-	0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_SW011	0020_SW011_230417	17 Apr 2023	ES2313254	0.21	0.23	<0.01	0.46	0.44	0.46	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_SW011	0020_SW011_231016	16 Oct 2023	ES2336397	0.08	0.09	<0.01	0.17	0.17	0.17	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_SW011	0020_SW011_240408	08 Apr 2024	ES2411964	0.26	0.16	<0.01	0.42	0.42	0.42	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_SW011	0020_SW011_241023	23 Oct 2024	ES2435143	0.10	0.08	<0.01	0.18	0.18	0.18	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_SW011	0020_SW011_250402	02 Apr 2025	ES2510618	0.10	0.14	<0.01	0.24	0.24	0.24	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_SW011	0020_SW011_251020	20 Oct 2025	ES2533546	0.04	0.06	<0.01	0.10	0.10	0.10	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_SW057	0020_QC113_220412	12 Apr 2022	ES2213152	0.53	0.19	0.01	0.75	0.72	0.75	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_SW057	0020_SW057_220412	12 Apr 2022	ES2213152	0.58	0.21	0.01	0.84	0.79	0.82	-	-	<0.02	<0.02	-	0.02	-
Captains Lagoon	Pathway	0020_SW057	0020_SW057_220707	07 Jul 2022	ES2224472	0.25	0.07	<0.01	0.32	0.32	0.32	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_SW057	0020_SW057_221010	10 Oct 2022	ES2236866	0.65	0.10	0.01	0.76	0.75	0.76	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_SW057	0020_SW057_230130	30 Jan 2023	ES2303447	0.82	0.15	0.02	1.05	0.97	1.05	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_SW057	0020_SW057_241021	21 Oct 2024	ES2435143	1.02	0.22	<0.01	1.24	1.24	1.24	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_SW057	0020_QC100_250331	31 Mar 2025	ES2510618	0.09	0.05	<0.01	0.14	0.14	0.14	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_SW057	0020_QC200_250331	31 Mar 2025	1209674	0.11	0.04	<0.01	0.15	0.15	0.15	0.11	0.15	<0.01	<0.01	<0.01	<0.01	<0.01
Captains Lagoon	Pathway	0020_SW057	0020_SW057_250331	31 Mar 2025	ES2510618	0.08	0.04	<0.01	0.12	0.12	0.12	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_SW057	0020_QC160_251020	20 Oct 2025	ES2533546	0.82	0.17	<0.01	0.99	0.99	0.99	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0020_SW057	0020_QC260_251020	20 Oct 2025	1285219	1.0 ^{#1}	0.17 ^{#1}	<0.01	1.2	1.17	1.17	-	-	<0.01	<0.01	0.04	0.02 ^{#1}	<0.01
Captains Lagoon	Pathway	0020_SW057	0020_SW057_251020	20 Oct 2025	ES2533546	0.95	0.20	0.01	1.16	1.15	1.16	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0021_MW018	MW018	04 May 2017	ES1711220	0.0381	0.176	0.0031	0.298	0.214	0.264	-	-	0.0231	<0.0005	-	0.0057	-
Captains Lagoon	Pathway	0021_MW018	0021_MW018_241022	22 Oct 2024	ES2435078	0.05	0.10	<0.01	0.15	0.15	0.15	-	-	<0.02	<0.02	-	<0.02	-



Appendix B
Table B5b
Historical Water Analytical Results - Captains Lagoon

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids				
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Sum of US EPA PFAS (PFOS + PFOA)*	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPrS)
EQL	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
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.0001	0.0005	0.0005	0.0003	0.0003	0.0003	0.01	0.01	0.0005	0.0005	0.01	0.0005	0.01
PFAS NEMP 3.0 2025 Recreational water quality	0.13		220										
	2	2	10		2								

Catchment	SPR	Location	Field ID	Date	Lab Report No.													
Captains Lagoon	Pathway	0021_MW018	0021_MW018_250402	02 Apr 2025	ES2510113	0.03	0.11	<0.01	0.14	0.14	0.14	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0021_MW018	0021_MW018_251021	21 Oct 2025	ES2533521	0.03	0.11	<0.01	0.16	0.14	0.16	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0021_MW108	A_MW08	08 May 2017	ES1711220	0.159	4.8	0.0539	7.02	4.96	6.59	-	-	0.358	<0.0005	-	0.0572	-
Captains Lagoon	Pathway	0021_MW108	0021_MW108_211019	19 Oct 2021	ES2138639	5.21	4.14	0.10	10.8	9.35	10.4	-	-	0.18	<0.02	-	0.17	-
Captains Lagoon	Pathway	0021_MW108	0021_MW108_220406	06 Apr 2022	ES2212442	4.20	3.49	0.14	9.39	7.69	9.00	-	-	0.20	<0.02	-	0.14	-
Captains Lagoon	Pathway	0021_MW108	0021_MW108_221013	13 Oct 2022	ES2237106	5.34	3.90	0.18	11.2	9.24	10.7	-	-	0.15	<0.02	-	0.16	-
Captains Lagoon	Pathway	0021_MW108	0021_MW108_230420	20 Apr 2023	ES2313364	7.04	5.76	0.25	15.4	12.8	14.8	-	-	0.21	<0.02	-	0.24	-
Captains Lagoon	Pathway	0021_MW108	0021_MW108_231018	18 Oct 2023	ES2336398	2.42	3.42	0.08	7.05	5.84	6.68	-	-	0.17	<0.02	-	0.11	-
Captains Lagoon	Pathway	0021_MW108	0021_MW108_240411	11 Apr 2024	ES2411994	5.87	4.01	0.15	11.4	9.88	10.9	-	-	0.18	<0.02	-	0.16	-
Captains Lagoon	Pathway	0021_MW108	0021_MW108_241028	28 Oct 2024	ES2435541	1.68	2.67	0.06	5.54	4.35	5.19	-	-	0.15	<0.02	-	0.06	-
Captains Lagoon	Pathway	0021_MW108	0021_MW108_250404	04 Apr 2025	ES2510113	3.18	2.29	0.07	6.23	5.47	5.97	-	-	0.08	<0.02	-	0.11	-
Captains Lagoon	Pathway	0021_MW108	0021_MW108_251023	23 Oct 2025	ES2533521	3.80	2.91	0.12	7.92	6.71	7.55	-	-	0.15	<0.02	-	0.12	-
Captains Lagoon	Pathway	0021_MW108	0021_QC166_251023	23 Oct 2025	ES2533538	4.05	3.21	0.12	8.49	7.26	8.11	-	-	0.15	<0.02	-	0.12	-
Captains Lagoon	Pathway	0021_MW018	0021_QC266_251023	23 Oct 2025	1285374	4.7 ^{#1}	2.9 ^{#1}	0.12 ^{#1}	8.8	7.6	8.42	-	-	0.14	<0.01	0.02	0.12 ^{#1}	0.03
Captains Lagoon	Pathway	0021_MW124	CL_MW01	04 May 2017	ES1711220	0.644	0.327	0.0152	1.12	0.971	1.06	-	-	0.0283	<0.0005	-	0.0211	-
Captains Lagoon	Pathway	0021_MW124	CL_MW01_180503	03 May 2018	ES1812871	0.09	0.09	<0.01	0.18	0.18	0.18	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0021_MW124	CL_QC114_180503	03 May 2018	ES1812871	0.43	0.25	<0.01	0.74	0.68	0.71	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0021_MW124	0021_MW124_211020	20 Oct 2021	ES2138639	0.44	0.28	<0.01	0.76	0.72	0.74	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0021_MW124	0021_MW124_220406	06 Apr 2022	ES2212442	0.51	0.33	0.01	0.96	0.84	0.93	-	-	0.03	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0021_MW124	0021_MW124_221011	11 Oct 2022	ES2237106	0.50	0.23	0.01	0.78	0.73	0.78	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0021_MW124	0021_MW124_230201	01 Feb 2023	ES2303446	0.50	0.28	0.01	0.84	0.78	0.84	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0021_MW124	0021_MW124_230417	17 Apr 2023	ES2313364	0.58	0.31	0.01	0.97	0.89	0.95	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0021_MW124	0021_MW124_231016	16 Oct 2023	ES2336398	0.31	0.20	<0.01	0.54	0.51	0.54	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0021_MW124	0021_MW124_240410	10 Apr 2024	ES2411994	0.31	0.22	<0.01	0.53	0.53	0.53	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0021_MW124	0021_MW124_241022	22 Oct 2024	ES2435078	0.24	0.16	<0.01	0.40	0.40	0.40	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0021_MW124	0021_MW125_250402	02 Apr 2025	ES2510113	0.05	0.09	<0.01	0.14	0.14	0.14	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0021_MW124	0021_MW124_250403	03 Apr 2025	ES2510113	0.44	0.22	<0.01	0.66	0.66	0.66	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0021_MW124	0021_MW124_251023	23 Oct 2025	ES2533521	0.38	0.17	0.01	0.58	0.55	0.58	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0021_MW134	TC_MW01	04 May 2017	ES1711220	0.0004	<0.0005	<0.0005	0.0004	0.0004	0.0004	-	-	<0.0005	<0.0005	-	<0.0005	-
Captains Lagoon	Pathway	0021_MW134	0021_MW134_220411	11 Apr 2022	ES2213156	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0021_MW134	0021_QC200_220411	11 Apr 2022	880531	<0.01	<0.01	<0.01	<0.1	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01
Captains Lagoon	Pathway	0021_MW134	0021_MW134_221011	11 Oct 2022	ES2236834	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0021_MW134	0021_MW134_230201	01 Feb 2023	ES2303446	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0021_MW134	0021_MW134_241024	24 Oct 2024	ES2435541	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0021_MW134	0021_MW134_250408	08 Apr 2025	ES2510113	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0021_MW134	0021_MW134_251022	22 Oct 2025	ES2533521	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0021_SW013	CL_SW09	18 Apr 2017	ES1709535	0.708	0.736	0.0102	1.58	1.44	1.52	-	-	0.0345	<0.0005	-	0.0116	-
Captains Lagoon	Pathway	0021_SW013	CL_SW09_180430	30 Apr 2018	ES1812871	0.596	0.655	0.0189	1.48	1.25	1.39	-	-	0.0581	0.0007	-	0.0234	-
Captains Lagoon	Pathway	0021_SW013	0021_SW013_211020	20 Oct 2021	ES2138639	0.70	0.47	0.02	1.36	1.17	1.32	-	-	0.03	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0021_SW013	0021_SW013_220406	06 Apr 2022	ES2212442	0.19	0.20	<0.01	0.44	0.39	0.44	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0021_SW013	0021_SW013_221010	10 Oct 2022	ES2237106	0.31	0.31	0.01	0.70	0.62	0.68	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0021_SW013	0021_SW013_230417	17 Apr 2023	ES2313364	0.46	0.47	0.02	1.06	0.93	1.02	-	-	0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0021_SW013	0021_SW013_231016	16 Oct 2023	ES2336399	0.49	0.23	0.01	0.76	0.72	0.76	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0021_SW013	0021_QC106_240410	10 Apr 2024	ES2412012	0.13	0.18	<0.01	0.31	0.31	0.31	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0021_SW013	0021_QC206_240410	10 Apr 2024	348825	0.13	0.16	<0.01	0.30	0.29	-	0.13	-	0.01	<0.02	-	<0.01	-
Captains Lagoon	Pathway	0021_SW013	0021_SW013_240410	10 Apr 2024	ES2412012	0.13	0.18	<0.01	0.31	0.31	0.31	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0021_SW013	0021_SW013_241022	22 Oct 2024	ES2435078	0.31	0.20	<0.01	0.54	0.51	0.54	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0021_SW013	0021_SW013_250401	01 Apr 2025	ES2510622	0.21	0.24	<0.01	0.45	0.45	0.45	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0021_SW019	DC_SW04	20 Apr 2017	ES1709644	4.27	5.23	0.0996	11.4	9.50	11.1	-	-	0.460	0.0023	-	0.156	-
Captains Lagoon	Pathway	0021_SW019	0021_SW019_211019	19 Oct 2021	ES2138639	0.53	0.37	0.01	1.09	0.90	1.05	-	-	0.04	<0.02	-	<0.02	-
Captains Lagoon	Pathway	0021_SW019	0021_QC203_220405	05 Apr 2022	293031	5.4	2.8	0.15	10	8.2	-	5.6	-	0.25	<0.02	-	0.16	-



Appendix B
Table B5b
Historical Water Analytical Results - Captains Lagoon

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids				
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Sum of US EPA PFAS (PFOS + PFOA)*	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecane sulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPrS)
	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	0.0001	0.0005	0.0005	0.0003	0.0003	0.0003	0.01	0.01	0.0005	0.0005	0.01	0.0005	0.01
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13		220										
PFAS NEMP 3.0 2025 Recreational water quality	2	2	10		2								

Catchment	SPR	Location	Field ID	Date	Lab Report No.													
Captains Lagoon	Pathway	0021_SW019	0021_SW019_220405	05 Apr 2022	ES2212442		4.57	2.60	0.12	8.96	7.17	8.57	-	-	0.25	<0.02	-	0.16
Captains Lagoon	Pathway	0021_SW019	0021_SW019_220707	07 Jul 2022	ES2224473		4.19	2.12	0.11	7.35	6.31	7.03	-	-	0.13	<0.02	-	0.14
Captains Lagoon	Pathway	0021_SW019	0021_SW019_221013	13 Oct 2022	ES2237106		2.55	2.03	0.11	5.70	4.58	5.42	-	-	0.13	<0.02	-	0.10
Captains Lagoon	Pathway	0021_SW019	0021_SW019_230201	01 Feb 2023	ES2303446		1.25	2.51	0.10	5.53	3.76	5.18	-	-	0.25	<0.02	-	0.07
Captains Lagoon	Pathway	0021_SW019	0021_SW019_230420	20 Apr 2023	ES2313364		1.92	2.58	0.10	5.96	4.50	5.57	-	-	0.24	<0.02	-	0.09
Captains Lagoon	Pathway	0021_SW019	0021_SW019_240411	11 Apr 2024	ES2412012		1.38	1.78	0.06	4.11	3.16	3.82	-	-	0.15	<0.02	-	0.05
Captains Lagoon	Pathway	0021_SW019	0021_SW019_250403	03 Apr 2025	ES2510622		1.29	1.66	0.07	3.87	2.95	3.61	-	-	0.13	<0.02	-	0.05
Captains Lagoon	Pathway	0021_SW021	DC_SW06	13 Apr 2017	ES1709064		0.747	0.762	0.0937	2.33	1.51	2.03	-	-	0.128	0.0038	-	0.0955
Captains Lagoon	Pathway	0021_SW021	0021_SW021_211020	20 Oct 2021	ES2138639		1.02	1.66	0.07	3.54	2.68	3.29	-	-	0.14	<0.02	-	0.06
Captains Lagoon	Pathway	0021_SW021	0021_SW021_220406	06 Apr 2022	ES2212442		0.15	0.05	<0.01	0.20	0.20	0.20	-	-	<0.02	<0.02	-	<0.02
Captains Lagoon	Pathway	0021_SW021	0021_SW021_220707	07 Jul 2022	ES2224473		0.65	0.45	0.02	1.30	1.10	1.23	-	-	0.03	<0.02	-	0.03
Captains Lagoon	Pathway	0021_SW021	0021_SW021_221014	14 Oct 2022	ES2237106		0.79	0.64	0.03	1.74	1.43	1.67	-	-	0.03	<0.02	-	0.03
Captains Lagoon	Pathway	0021_SW021	0021_SW021_240412	12 Apr 2024	ES2412012		0.61	1.02	0.03	2.08	1.63	1.93	-	-	0.08	<0.02	-	0.02
Captains Lagoon	Pathway	0021_SW021	0021_QC106_250402	02 Apr 2025	ES2510113		0.20	0.27	0.02	0.55	0.47	0.53	-	-	<0.02	<0.02	-	<0.02
Captains Lagoon	Pathway	0021_SW021	0021_QC206_250402	02 Apr 2025	1210052		0.17	0.33	<0.01	0.63	0.5	0.6	0.17	0.5	0.03	<0.01	<0.01	<0.01
Captains Lagoon	Pathway	0021_SW021	0021_SW021_250402	02 Apr 2025	ES2510622		0.17	0.34	<0.01	0.61	0.51	0.58	-	-	0.02	<0.02	-	<0.02
Captains Lagoon	Receptor	0020_SW004	CL_SW01	18 Apr 2017	ES1709535		0.768	0.184	0.0031	0.98	0.952	0.967	-	-	0.0067	<0.0005	-	0.0025
Captains Lagoon	Receptor	0020_SW004	CL_SW01_180501	01 May 2018	ES1812871		0.269	0.292	0.0119	0.716	0.561	0.677	-	-	0.0238	<0.0005	-	0.0107
Captains Lagoon	Receptor	0020_SW004	0020_SW004_211018	18 Oct 2021	ES2138638		0.13	0.18	<0.01	0.33	0.31	0.33	-	-	<0.02	<0.02	-	<0.02
Captains Lagoon	Receptor	0020_SW004	0020_SW004_220404	04 Apr 2022	ES2212597		0.23	0.21	<0.01	0.44	0.44	0.44	-	-	<0.02	<0.02	-	<0.02
Captains Lagoon	Receptor	0020_SW004	0020_SW004_220101	07 Jul 2022	ES2224472		0.24	0.08	<0.01	0.32	0.32	0.32	-	-	<0.02	<0.02	-	<0.02
Captains Lagoon	Receptor	0020_SW004	0020_SW004_221011	11 Oct 2022	ES2237104		0.02	<0.01	<0.01	0.02	0.02	0.02	-	-	<0.02	<0.02	-	<0.02
Captains Lagoon	Receptor	0020_SW004	0020_SW004_230130	30 Jan 2023	ES2303447		0.89	0.12	<0.01	1.03	1.01	1.03	-	-	<0.02	<0.02	-	<0.02
Captains Lagoon	Receptor	0020_SW004	0020_SW004_230417	17 Apr 2023	ES2313254		0.15	0.11	<0.01	0.26	0.26	0.26	-	-	<0.02	<0.02	-	<0.02
Captains Lagoon	Receptor	0020_SW004	0020_SW004_231016	16 Oct 2023	ES2336397		0.27	0.10	<0.01	0.37	0.37	0.37	-	-	<0.02	<0.02	-	<0.02
Captains Lagoon	Receptor	0020_SW004	0020_SW004_240408	08 Apr 2024	ES2411964		0.25	0.12	<0.01	0.37	0.37	0.37	-	-	<0.02	<0.02	-	<0.02
Captains Lagoon	Receptor	0020_SW004	0020_SW004_241025	25 Oct 2024	ES2435539		0.22	0.10	<0.01	0.32	0.32	0.32	-	-	<0.02	<0.02	-	<0.02
Captains Lagoon	Receptor	0020_SW004	0020_SW004_250331	31 Mar 2025	ES2510618		0.02	0.02	<0.01	0.04	0.04	0.04	-	-	<0.02	<0.02	-	<0.02
Captains Lagoon	Receptor	0020_SW004	0020_SW004_251020	20 Oct 2025	ES2533546		0.08	0.05	<0.01	0.13	0.13	0.13	-	-	<0.02	<0.02	-	<0.02
Captains Lagoon	Receptor	0020_SW005	CL_SW02	18 Apr 2017	ES1709535		1.64	0.289	0.0047	1.98	1.93	1.96	-	-	0.0135	<0.0005	-	0.003
Captains Lagoon	Receptor	0020_SW005	CL_SW02_180501	01 May 2018	ES1812871		0.300	0.340	0.0133	0.802	0.640	0.762	-	-	0.0241	<0.0005	-	0.0115
Captains Lagoon	Receptor	0020_SW005	0020_SW005_211018	18 Oct 2021	ES2138638		0.20	0.19	<0.01	0.44	0.39	0.44	-	-	0.03	<0.02	-	<0.02
Captains Lagoon	Receptor	0020_SW005	0020_SW005_220404	04 Apr 2022	ES2212597		0.62	0.33	0.01	1.00	0.95	1.00	-	-	<0.02	<0.02	-	<0.02
Captains Lagoon	Receptor	0020_SW005	0020_SW005_221011	11 Oct 2022	ES2237104		0.81	0.17	0.02	1.05	0.98	1.05	-	-	0.02	<0.02	-	<0.02
Captains Lagoon	Receptor	0020_SW005	0020_SW005_230417	17 Apr 2023	ES2313254		2.07	0.87	0.06	3.50	2.94	3.41	-	-	0.03	<0.02	-	0.05
Captains Lagoon	Receptor	0020_SW005	0020_SW005_231016	16 Oct 2023	ES2336397		0.26	0.12	<0.01	0.40	0.38	0.40	-	-	<0.02	<0.02	-	<0.02
Captains Lagoon	Receptor	0020_SW005	0020_SW005_240408	08 Apr 2024	ES2411964		0.33	0.06	<0.01	0.39	0.39	0.39	-	-	<0.02	<0.02	-	<0.02
Captains Lagoon	Receptor	0020_SW005	0020_SW005_241025	25 Oct 2024	ES2435539		0.18	0.09	<0.01	0.27	0.27	0.27	-	-	<0.02	<0.02	-	<0.02
Captains Lagoon	Receptor	0020_SW005	0020_SW005_250331	31 Mar 2025	ES2510618		0.03	0.02	<0.01	0.05	0.05	0.05	-	-	<0.02	<0.02	-	<0.02
Captains Lagoon	Receptor	0020_SW005	0020_SW005_251020	20 Oct 2025	ES2533546		0.08	0.05	<0.01	0.13	0.13	0.13	-	-	<0.02	<0.02	-	<0.02
Captains Lagoon	Receptor	0020_SW010	CL_SW07	18 Apr 2017	ES1709535		0.15	0.173	0.0027	0.366	0.323	0.349	-	-	0.0122	<0.0005	-	0.0025
Captains Lagoon	Receptor	0020_SW010	CL_QC221_180501	01 May 2018	597346		0.28 ^{#1}	0.30 ^{#1}	0.01 ^{#1}	0.71	0.58	0.69	-	-	0.03 ^{#1}	<0.01	-	<0.01 ^{#1}
Captains Lagoon	Receptor	0020_SW010	CL_SW07_180501	01 May 2018	ES1812871		0.218	0.269	0.0142	0.651	0.487	0.611	-	-	0.0261	<0.0005	-	0.0116
Captains Lagoon	Receptor	0020_SW010	0020_SW010_211018	18 Oct 2021	ES2138638		0.17	0.21	<0.01	0.41	0.38	0.41	-	-	<0.02	<0.02	-	<0.02
Captains Lagoon	Receptor	0020_SW010	0020_SW010_220404	04 Apr 2022	ES2212597		0.21	0.10	<0.01	0.31	0.31	0.31	-	-	<0.02	<0.02	-	<0.02
Captains Lagoon	Receptor	0020_SW010	0020_SW010_220101	07 Jul 2022	ES2224472		0.16	0.09	<0.01	0.25	0.25	0.25	-	-	<0.02	<0.02	-	<0.02
Captains Lagoon	Receptor	0020_SW010	0020_SW010_221012	10 Oct 2022	ES2236866		0.22	0.08	<0.01	0.30	0.30	0.30	-	-	<0.02	<0.02	-	<0.02
Captains Lagoon	Receptor	0020_SW010	0020_SW010_221012	12 Oct 2022	ES2237104		0.14	0.06	<0.01	0.23	0.20	0.23	-	-	0.03	<0.02	-	<0.02
Captains Lagoon	Receptor	0020_SW010	0020_QC120_230130	30 Jan 2023	ES2303447		0.14	0.11	<0.01	0.27	0.25	0.27	-	-	<0.02	<0.02	-	<0.02
Captains Lagoon	Receptor	0020_SW010	0020_SW010_230130	30 Jan 2023	ES2303447		0.16	0.12	<0.01	0.30	0.28	0.30	-	-	<0.02	<0.02	-	<0.02
Captains Lagoon	Receptor	0020_SW010	0020_SW010_230417	17 Apr 2023	ES2313254		0.07	0.07	<0.01	0.14	0.14	0.14	-	-	<0.02	<0.02	-	<0.02



Appendix B
Table B5b
Historical Water Analytical Results - Captains Lagoon

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids				
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Sum of US EPA PFAS (PFOS + PFOA)*	Sum of enHealth PFAS (PFHxS + PFOA)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPrS)
	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	0.0001	0.0005	0.0005	0.0003	0.0003	0.0003	0.01	0.01	0.0005	0.0005	0.01	0.0005	0.01
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13		220										
PFAS NEMP 3.0 2025 Recreational water quality	2	2	10		2								

Catchment	SPR	Location	Field ID	Date	Lab Report No.													
Captains Lagoon	Receptor	0020_SW010	0020_SW010_231016	16 Oct 2023	ES2336397	1.16	0.12	<0.01	1.28	1.28	1.28	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Receptor	0020_SW010	0020_SW010_240408	08 Apr 2024	ES2411964	0.16	0.12	<0.01	0.30	0.28	0.30	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Receptor	0020_SW010	0020_QC110_241025	25 Oct 2024	ES2435539	0.18	0.08	<0.01	0.26	0.26	0.26	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Receptor	0020_SW010	0020_QC210_241025	25 Oct 2024	1156671	0.32	0.08	<0.01	0.41	0.4	0.41	0.32	0.4	<0.01	<0.01	<0.01	<0.01	<0.01
Captains Lagoon	Receptor	0020_SW010	0020_SW010_241025	25 Oct 2024	ES2435539	0.25	0.08	<0.01	0.33	0.33	0.33	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Receptor	0020_SW010	0020_SW010_250331	31 Mar 2025	ES2510618	0.10	0.06	<0.01	0.16	0.16	0.16	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Receptor	0020_SW010	0020_SW010_251020	20 Oct 2025	ES2533546	0.09	0.04	<0.01	0.13	0.13	0.13	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Receptor	0020_SW012	CL_QC206_180326	26 Mar 2018	592055	0.0003 ^{#1}	<0.001	<0.001	<0.005	<0.001	<0.005	-	-	<0.001	<0.001	-	<0.001	-
Captains Lagoon	Receptor	0020_SW012	CL_SW12_180326	26 Mar 2018	ES1809241	0.0020	0.0013	<0.0005	0.0033	0.0033	0.0033	-	-	<0.0005	<0.0005	-	<0.0005	-
Captains Lagoon	Receptor	0020_SW012	CL_SW12_180515	15 May 2018	ES1814324	0.0007	0.0009	<0.0005	0.0016	0.0016	0.0016	-	-	<0.0005	<0.0005	-	<0.0005	-
Captains Lagoon	Receptor	0020_SW012	0020_SW012_211018	18 Oct 2021	ES2138638	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Receptor	0020_SW012	0020_SW012_220404	04 Apr 2022	ES2212597	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Receptor	0020_SW012	0020_SW012_221011	11 Oct 2022	ES2237104	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Receptor	0020_SW012	0020_SW012_230417	17 Apr 2023	ES2313254	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Receptor	0020_SW012	0020_SW012_231016	16 Oct 2023	ES2336397	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Receptor	0020_SW012	0020_QC104_240408	08 Apr 2024	ES2411964	0.14	0.13	<0.01	0.27	0.27	0.27	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Receptor	0020_SW012	0020_QC204_240408	08 Apr 2024	348827	0.27	0.14	<0.01	0.44	0.41	-	0.27	-	0.01	<0.02	-	<0.01	-
Captains Lagoon	Receptor	0020_SW012	0020_SW012_240408	08 Apr 2024	ES2411964	0.26	0.11	<0.01	0.37	0.37	0.37	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Receptor	0020_SW012	0020_SW012_241025	25 Oct 2024	ES2435539	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Receptor	0020_SW012	0020_SW012_250331	31 Mar 2025	ES2510618	0.03	0.02	<0.01	0.05	0.05	0.05	-	-	<0.02	<0.02	-	<0.02	-
Captains Lagoon	Receptor	0020_SW012	0020_SW012_251020	20 Oct 2025	ES2533546	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-

Statistics													
Number of Results	378	378	378	378	378	366	28	16	378	378	19	378	24
Number of Detects	335	336	184	340	340	329	24	13	181	21	6	140	6
Minimum Concentration	<0.0001	<0.0005	<0.0005	0.0004	0.0004	0.0004	<0.01	<0.01	<0.0005	<0.0005	<0.01	<0.0005	0.01
Minimum Detect	0.0003	0.0006	0.0015	0.0004	0.0004	0.0004	0.02	0.15	0.0014	0.0007	0.02	0.0019	0.01
Maximum Concentration	456	37.4	3.26	517	492	511	9.15	12.95	1.9	0.12	0.66	3.46	0.31
Maximum Detect	456	37.4	3.26	517	492	511	9.15	12.95	1.9	0.12	0.66	3.46	0.31
Average Concentration *	4.3	1.2	0.073	6.2	5.5	6.1	2	2.7	0.074	0.011	0.048	0.082	0.021
Geometric Average *	0.25	0.2	0.014	0.53	0.46	0.51	0.28	0.44	0.022	0.0076	0.011	0.018	0.0081
Median Concentration *	0.255	0.22	0.005	0.63	0.51	0.61	0.22	0.45	0.01	0.01	0.005	0.01	0.005
Standard Deviation *	33	3.3	0.28	38	36	38	3.1	4	0.19	0.013	0.15	0.29	0.062
Geometric Standard Deviation *	11	8.4	4.9	11	11	11	12	14	4.2	2.9	3.7	4.4	2.7
95% UCL (Student's-t) *	7.114	1.44	0.0965	9.395	8.518	9.344	3.045	4.426	0.0901	0.0122	0.107	0.107	0.0432
Number of Env Standard Exceedances	259	55	0	0	96	0	0	0	0	0	0	0	0
Number of Env Standard Exceedances (Detects Only)	259	55	0	0	96	0	0	0	0	0	0	0	0
% of Detects	89	89	49	90	90	90	86	81	48	6	32	37	25
% of Non-Detects	11	11	51	10	10	10	14	19	52	94	68	63	75
% of Detects at or above Env Standards	69	15	0	0	25	0	0	0	0	0	0	0	0
% of Results Below Env Standards or Non-Detect	31	85	100	100	75	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.
#2 Reported Analyte LOR is higher than Requested Analyte LOR



Appendix B
Table B5b
Historical Water Analytical Results - Captains Lagoon

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Carboxylic Acids												
	Perfluoropentane sulfonic acid (PFPeS)	Perfluoronanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTTrDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluoro-n-hexadecanoic acid (PFHxDA)
	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	0.0005	0.01	0.002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.05
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%													
PFAS NEMP 3.0 2025 Recreational water quality													

Catchment	SPR	Location	Field ID	Date	Lab Report No.													
Captains Lagoon	Source	0020_MW052	0020_MW052_211221	21 Dec 2021	ES2147062	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0020_MW052	0020_MW052_250331	31 Mar 2025	ES2510618	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0020_MW052	0020_MW052_251020	20 Oct 2025	ES2533546	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW028	MW028	03 May 2017	ES1710866	<0.0005	-	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-
Captains Lagoon	Source	0021_MW028	0021_MW028_211020	20 Oct 2021	ES2138639	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.06	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW028	0021_QC103_211020	20 Oct 2021	ES2138639	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.06	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW028	0021_MW028_220406	06 Apr 2022	ES2212442	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW028	0021_QC204_220406	06 Apr 2022	293031	0.03	-	0.03	<0.02	<0.05	<0.01	0.13	<0.01	0.03	<0.5	<0.1	<0.02	-
Captains Lagoon	Source	0021_MW028	0021_MW028_221014	14 Oct 2022	ES2237106	0.02	-	<0.1	<0.02	<0.02	<0.02	0.15	<0.02	0.04	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW028	0021_MW028_230421	21 Apr 2023	ES2313364	0.10	-	<0.1	<0.02	<0.02	<0.02	0.04	<0.02	0.05	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW028	0021_MW028_231019	19 Oct 2023	ES2336398	0.02	-	<0.1	<0.02	<0.02	<0.02	0.12	<0.02	0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW028	0021_MW028_240412	12 Apr 2024	ES2411994	0.02	-	<0.1	<0.02	<0.02	<0.02	0.09	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW028	0021_MW028_241022	22 Oct 2024	ES2435078	0.02	-	<0.1	<0.02	<0.02	<0.02	0.14	<0.02	0.06	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW028	0021_QC103_241022	22 Oct 2024	ES2435078	0.02	-	<0.1	<0.02	<0.02	<0.02	0.14	<0.02	0.05	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW028	0021_QC203_241022	22 Oct 2024	1154751	0.02	-	<0.05	<0.01	<0.01	<0.01	0.11	<0.01	0.05	<0.01	<0.01	<0.01	-
Captains Lagoon	Source	0021_MW028	0021_MW028_250402	02 Apr 2025	ES2510113	0.10	-	0.1	<0.02	<0.02	0.04	0.63	<0.02	0.19	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW028	0021_MW028_251021	21 Oct 2025	ES2533521	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW028	0021_QC123_251021	21 Oct 2025	ES2533538	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW028	0021_QC223_251021	21 Oct 2025	1285374	<0.01	-	<0.05	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-
Captains Lagoon	Source	0021_MW030	MW030	03 May 2017	ES1710866	<0.0005	-	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-
Captains Lagoon	Source	0021_MW030	0021_MW030_211021	21 Oct 2021	ES2138639	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW030	0021_MW030_220406	06 Apr 2022	ES2212442	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW030	0021_MW030_221014	14 Oct 2022	ES2237106	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW030	0021_MW030_230419	19 Apr 2023	ES2313364	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW030	0021_MW030_231018	18 Oct 2023	ES2336398	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW030	0021_MW030_240410	10 Apr 2024	ES2411994	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW030	0021_MW030_241024	24 Oct 2024	ES2435541	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW030	0021_MW030_250403	03 Apr 2025	ES2510113	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW030	0021_QC255_250403	03 Apr 2025	1210052	<0.01	-	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-
Captains Lagoon	Source	0021_MW030	0021_MW030_251022	22 Oct 2025	ES2533521	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW062	0021_MW062_210621	21 Jun 2021	ES2123994	2.59	-	0.8	<0.02	<0.02	2.08	9.48	0.04	1.44	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW062	0021_QC113_210621	21 Jun 2021	ES2123994	2.70	-	0.8	<0.02	<0.02	2.20	10.7	0.04	1.42	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW062	0021_MW062_240411	11 Apr 2024	ES2411994	1.14	-	0.4	0.05	<0.02	0.90	4.62	0.07	0.63	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW062	0021_MW062_241024	24 Oct 2024	ES2435541	0.71	-	0.3	0.04	<0.02	0.70	4.64	0.06	0.69	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW062	0021_QC157_241025	25 Oct 2024	ES2435541	1.08	-	0.3	0.04	<0.02	0.70	3.81	0.05	0.61	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW062	0021_MW062_250129	29 Jan 2025	ES2503552	1.33	-	0.3	<0.02	<0.02	0.80	4.47	0.07	0.80	<0.05	<0.02	<0.02	<0.05
Captains Lagoon	Source	0021_MW062	0021_MW062_250424	24 Apr 2025	ES2512435	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW062	0021_MW062_251022	22 Oct 2025	ES2533521	0.71	-	0.2	0.04	<0.02	0.50	2.49	0.06	0.38	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW102	A_MW02	01 May 2017	ES1710866	1.36	-	<0.002	<0.0005	<0.0005	0.153	1.17	<0.0005	0.234	<0.0005	<0.0005	<0.0005	-
Captains Lagoon	Source	0021_MW102	0021_MW102_211019	19 Oct 2021	ES2138639	0.35	-	0.1	<0.02	<0.02	0.12	1.13	<0.02	0.18	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW102	0021_QC201_211019	19 Oct 2021	281322	0.37	-	0.1	<0.02	<0.05	0.15	1.0	<0.01	0.2	<0.5	<0.1	<0.02	-
Captains Lagoon	Source	0021_MW102	0021_MW102_220405	05 Apr 2022	ES2212442	0.65	-	0.1	<0.02	<0.02	0.13	1.34	<0.02	0.16	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW102	0021_MW102_221013	13 Oct 2022	ES2237106	0.20	-	<0.1	<0.02	<0.02	0.06	0.54	<0.02	0.10	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW102	0021_MW102_230420	20 Apr 2023	ES2313364	0.63	-	0.2	<0.02	<0.02	0.23	1.56	<0.02	0.32	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW102	0021_QC109_230420	20 Apr 2023	ES2313364	0.48	-	0.2	<0.02	<0.02	0.18	0.51	<0.02	0.20	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW102	0021_QC209_230420	20 Apr 2023	321517	0.41	-	0.1	<0.02	<0.05	0.13	1.2	0.01	0.25	<0.5	<0.1	<0.02	-
Captains Lagoon	Source	0021_MW102	0021_MW102_231019	19 Oct 2023	ES2336398	0.26	-	0.1	<0.02	<0.02	0.13	1.16	<0.02	0.19	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW102	0021_MW102_240410	10 Apr 2024	ES2411994	0.32	-	0.1	<0.02	<0.02	0.14	0.91	<0.02	0.16	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW102	0021_MW102_241024	24 Oct 2024	ES2435541	0.46	-	0.2	<0.02	<0.02	0.17	1.32	<0.02	0.23	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW102	0021_MW102_250404	04 Apr 2025	ES2510113	0.36	-	0.1	<0.02	<0.02	0.14	0.98	<0.02	0.16	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW102	0021_MW102_251022	22 Oct 2025	ES2533521	0.63	-	0.1	<0.02	<0.02	0.20	1.28	<0.02	0.20	<0.05	<0.02	<0.02	-



Appendix B
Table B5b
Historical Water Analytical Results - Captains Lagoon

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

EQI	PFAS - Perfluoroalkyl Carboxylic Acids												
	Perfluoropentane sulfonic acid (PFPeS)	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTTrDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluoro-n-hexadecanoic acid (PFHxDA)
	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
	0.0005	0.01	0.002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.05
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%													
PFAS NEMP 3.0 2025 Recreational water quality													

Catchment	SPR	Location	Field ID	Date	Lab Report No.													
Captains Lagoon	Source	0021_MW109	A_MW09	08 May 2017	ES1711220	0.0035	-	<0.002	<0.0005	<0.0005	0.0013	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-
Captains Lagoon	Source	0021_MW109	0021_MW109_211019	19 Oct 2021	ES2138639	0.11	-	<0.1	<0.02	<0.02	0.04	0.39	<0.02	0.06	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW109	0021_MW109_220406	06 Apr 2022	ES2212442	0.09	-	<0.1	<0.02	<0.02	0.02	0.26	<0.02	0.03	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW109	0021_MW109_221013	13 Oct 2022	ES2237106	0.04	-	<0.1	<0.02	<0.02	<0.02	0.12	<0.02	0.03	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW109	0021_QC209_221013	13 Oct 2022	308187	0.04	-	<0.02	<0.02	<0.05	0.02	0.11	<0.01	0.02	<0.5	<0.1	<0.02	-
Captains Lagoon	Source	0021_MW109	0021_MW109_230420	20 Apr 2023	ES2313364	0.09	-	<0.1	<0.02	<0.02	0.02	0.25	<0.02	0.06	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW109	0021_MW109_231018	18 Oct 2023	ES2336398	0.07	-	0.1	<0.02	<0.02	0.02	0.22	<0.02	0.03	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW109	0021_MW109_240410	10 Apr 2024	ES2411994	0.05	-	<0.1	<0.02	<0.02	<0.02	0.19	<0.02	0.04	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW109	0021_MW109_241024	24 Oct 2024	ES2435541	0.02	-	<0.1	<0.02	<0.02	<0.02	0.11	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW109	0021_QC256_241024	24 Oct 2024	1156146	0.04	-	<0.05	<0.01	<0.01	0.02	0.11	<0.01	0.02	<0.01	<0.01	<0.01	-
Captains Lagoon	Source	0021_MW109	0021_MW109_250131	31 Jan 2025	ES2503552	0.05	-	<0.1	<0.02	<0.02	<0.02	0.10	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Captains Lagoon	Source	0021_MW109	0021_MW109_250403	03 Apr 2025	ES2510113	0.07	-	<0.1	<0.02	<0.02	0.02	0.26	<0.02	0.05	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW109	0021_MW109_251022	22 Oct 2025	ES2533521	0.06	-	<0.1	<0.02	<0.02	<0.02	0.15	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW119	C_MW03	03 May 2017	ES1710866	<0.0005	-	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-
Captains Lagoon	Source	0021_MW119	0021_MW119_211020	20 Oct 2021	ES2138639	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW119	0021_QC202_211020	20 Oct 2021	281322	<0.01	-	<0.02	<0.02	<0.05	<0.01	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02	-
Captains Lagoon	Source	0021_MW119	0021_MW119_220406	06 Apr 2022	ES2212442	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW119	0021_MW119_221011	11 Oct 2022	ES2237106	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW119	0021_MW119_230203	03 Feb 2023	ES2303695	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW119	0021_MW119_230421	21 Apr 2023	ES2313364	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW119	0021_MW119_231019	19 Oct 2023	ES2336398	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW119	0021_MW119_240412	12 Apr 2024	ES2411994	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW119	0021_MW119_241022	22 Oct 2024	ES2435078	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW119	0021_MW119_250402	02 Apr 2025	ES2510113	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW119	0021_MW119_251021	21 Oct 2025	ES2533521	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW120	C_MW04	03 May 2017	ES1710866	0.0706	-	<0.002	<0.0005	<0.0005	0.0032	0.0402	<0.0005	0.0075	<0.0005	<0.0005	<0.0005	-
Captains Lagoon	Source	0021_MW120	0021_MW120_211020	20 Oct 2021	ES2138639	0.06	-	<0.1	<0.02	<0.02	<0.02	0.10	<0.02	0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW120	0021_QC102_211020	20 Oct 2021	ES2138639	0.06	-	<0.1	<0.02	<0.02	<0.02	0.10	<0.02	0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW120	0021_MW120_221014	14 Oct 2022	ES2237106	0.04	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW120	0021_MW120_230421	21 Apr 2023	ES2313364	0.30	-	<0.1	<0.02	<0.02	0.04	0.41	<0.02	0.06	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW120	0021_MW120_231019	19 Oct 2023	ES2336398	0.22	-	<0.1	<0.02	<0.02	0.04	0.34	<0.02	0.07	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW120	0021_MW120_240412	12 Apr 2024	ES2411994	0.16	-	<0.1	<0.02	<0.02	<0.02	0.18	<0.02	0.05	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW120	0021_MW120_241022	22 Oct 2024	ES2435078	0.17	-	<0.1	<0.02	<0.02	0.02	0.20	<0.02	0.05	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW120	0021_MW120_250402	02 Apr 2025	ES2510113	0.18	-	<0.1	<0.02	<0.02	0.02	0.20	<0.02	0.04	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW120	0021_MW120_251021	21 Oct 2025	ES2533521	0.08	-	<0.1	<0.02	<0.02	<0.02	0.07	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW121	C_MW05	03 May 2017	ES1710866	0.0157	-	<0.002	<0.0005	<0.0005	0.0006	0.0060	<0.0005	0.0020	<0.0005	<0.0005	<0.0005	-
Captains Lagoon	Source	0021_MW121	0021_MW121_211022	22 Oct 2021	ES2138639	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW121	0021_MW121_221014	14 Oct 2022	ES2237106	0.02	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW121	0021_MW121_230201	01 Feb 2023	ES2303446	0.02	-	<0.1	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW121	0021_QC202_230201	01 Feb 2023	961655	0.02	-	<0.05	<0.01	<0.01	<0.01	0.04	<0.01	0.01 ^{#1}	<0.01	<0.01	<0.01	-
Captains Lagoon	Source	0021_MW121	0021_MW121_230420	20 Apr 2023	ES2313364	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW121	0021_MW121_231018	18 Oct 2023	ES2336398	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW121	0021_QC112_231018	18 Oct 2023	ES2336399	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW121	0021_QC212_231018	18 Oct 2023	335876	<0.01	-	<0.02	<0.02	<0.05	0.01	0.04	<0.01	0.07	<0.5	<0.1	<0.02	-
Captains Lagoon	Source	0021_MW121	0021_MW121_240410	10 Apr 2024	ES2411994	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW121	0021_QC111_240410	10 Apr 2024	ES2411994	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW121	0021_QC211_240410	10 Apr 2024	348825	<0.01	-	<0.02	<0.02	<0.05	<0.01	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02	-
Captains Lagoon	Source	0021_MW121	0021_MW121_241024	24 Oct 2024	ES2435541	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW121	0021_MW121_250402	02 Apr 2025	ES2510113	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW121	0021_MW121_251022	22 Oct 2025	ES2533521	0.04	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW123	C_MW07	08 May 2017	ES1711220	0.486	-	<0.002	<0.0005	<0.0005	0.0395	0.524	<0.0005	0.0805	<0.0005	<0.0005	<0.0005	-



Appendix B
Table B5b
Historical Water Analytical Results - Captains Lagoon

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Carboxylic Acids												
	Perfluoropentane sulfonic acid (PFPeS)	Perfluoronanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluoro-n-hexadecanoic acid (PFHxDA)
	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	0.0005	0.01	0.002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.05
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%													
PFAS NEMP 3.0 2025 Recreational water quality													

Catchment	SPR	Location	Field ID	Date	Lab Report No.													
Captains Lagoon	Source	0021_MW123	0021_MW123_211026	26 Oct 2021	ES2138639	0.25	-	<0.1	<0.02	<0.02	0.05	0.20	<0.02	0.06	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW123	0021_MW123_220406	06 Apr 2022	ES2212442	0.07	-	<0.1	<0.02	<0.02	<0.02	0.10	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW123	0021_MW123_221014	14 Oct 2022	ES2237106	0.15	-	<0.1	<0.02	<0.02	0.03	0.12	<0.02	0.04	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW123	0021_MW123_230421	21 Apr 2023	ES2313364	0.20	-	<0.1	<0.02	<0.02	0.04	0.19	<0.02	0.05	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW123	0021_MW123_231019	19 Oct 2023	ES2336398	0.19	-	<0.1	<0.02	<0.02	0.04	0.22	<0.02	0.05	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW123	0021_MW123_240412	12 Apr 2024	ES2411994	0.18	-	<0.1	<0.02	<0.02	0.04	0.15	<0.02	0.05	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW123	0021_MW123_241022	22 Oct 2024	ES2435078	0.19	-	<0.1	<0.02	<0.02	0.03	0.18	<0.02	0.05	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW123	0021_MW123_250402	02 Apr 2025	ES2510113	0.13	-	<0.1	<0.02	<0.02	0.03	0.13	<0.02	0.04	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW123	0021_MW123_251021	21 Oct 2025	ES2533521	0.10	-	<0.1	<0.02	<0.02	0.02	0.10	<0.02	0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW127	FC_MW03	04 May 2017	ES1711220	0.0386	-	<0.002	<0.0005	<0.0005	0.0032	0.0203	<0.0005	0.008	<0.0005	<0.0005	<0.0005	-
Captains Lagoon	Source	0021_MW127	0021_MW127_220411	11 Apr 2022	ES2213156	0.06	-	<0.1	<0.02	<0.02	<0.02	0.06	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW127	0021_MW127_221011	11 Oct 2022	ES2236834	0.05	-	<0.1	<0.02	<0.02	<0.02	0.06	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW127	0021_QC225_221012	11 Oct 2022	931500	0.05 ^{#1}	<0.01	<0.05	<0.01	<0.01	<0.01	0.06 ^{#1}	<0.01	0.01 ^{#1}	<0.01	<0.01	<0.01	-
Captains Lagoon	Source	0021_MW127	0021_MW127_230201	01 Feb 2023	ES2303446	0.06	-	<0.1	<0.02	<0.02	<0.02	0.06	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW127	0021_QC102_230201	01 Feb 2023	ES2303446	0.05	-	<0.1	<0.02	<0.02	<0.02	0.05	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW127	0021_MW127_241024	24 Oct 2024	ES2435541	0.06	-	<0.1	<0.02	<0.02	<0.02	0.08	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW127	0021_MW127_250402	02 Apr 2025	ES2510113	0.08	-	<0.1	<0.02	<0.02	<0.02	0.12	<0.02	0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_MW127	0021_MW127_251022	22 Oct 2025	ES2533521	0.06	-	<0.1	<0.02	<0.02	<0.02	0.08	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_SW001	AB_SW01	20 Apr 2017	ES1709644	0.0920	-	<0.002	0.0020	<0.0005	0.0245	0.884	0.0015	0.0783	<0.0005	<0.0005	<0.0005	-
Captains Lagoon	Source	0021_SW001	0021_QC101_211019	19 Oct 2021	ES2138639	1.21	-	0.2	0.03	<0.02	0.33	3.07	0.04	0.60	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_SW001	0021_SW001_211019	19 Oct 2021	ES2138639	1.26	-	0.2	0.03	<0.02	0.33	3.00	0.04	0.57	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_SW001	0021_QC101_220405	05 Apr 2022	ES2212442	0.21	-	<0.1	<0.02	<0.02	0.08	0.97	<0.02	0.15	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_SW001	0021_SW001_220405	05 Apr 2022	ES2212442	0.19	-	<0.1	<0.02	<0.02	0.07	0.80	<0.02	0.13	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_SW001	0021_QC101_220707	07 Jul 2022	ES2224473	0.24	-	<0.1	<0.02	<0.02	0.10	0.60	<0.02	0.10	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_SW001	0021_QC201_220707	07 Jul 2022	905309	0.18 ^{#1}	0.03	<0.05	0.01	<0.01	0.08 ^{#1}	0.60 ^{#1}	0.01	0.10	<0.01	<0.01	<0.01	-
Captains Lagoon	Source	0021_SW001	0021_SW001_220101	07 Jul 2022	ES2224473	0.29	-	<0.1	<0.02	<0.02	0.12	0.68	<0.02	0.12	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_SW001	0021_SW001_221011	11 Oct 2022	ES2236834	0.10	-	<0.1	<0.02	<0.02	0.03	0.24	<0.02	0.05	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_SW001	0021_SW001_221013	13 Oct 2022	ES2237106	0.19	-	<0.1	<0.02	<0.02	0.08	0.49	<0.02	0.10	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_SW001	0021_SW001_230201	01 Feb 2023	ES2303446	0.16	-	<0.1	<0.02	<0.02	0.06	0.39	<0.02	0.10	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_SW001	0021_SW001_230420	20 Apr 2023	ES2313364	0.47	-	0.1	<0.02	<0.02	0.17	1.18	0.02	0.24	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_SW001	0021_SW001_230807	07 Aug 2023	ES2326593	0.03	-	<0.1	<0.02	<0.02	0.02	0.10	<0.02	0.03	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_SW001	0021_SW001_231004	04 Oct 2023	ES2334226	0.04	-	0.2	<0.02	<0.02	0.02	0.18	<0.02	0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_SW001	0021_SW001_231018	18 Oct 2023	ES2336399	0.08	-	<0.1	<0.02	<0.02	0.04	0.31	<0.02	0.07	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_SW001	0021_SW001_240410	10 Apr 2024	ES2412012	0.16	-	<0.1	<0.02	<0.02	0.06	0.39	<0.02	0.05	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_SW001	0021_SW001_250403	03 Apr 2025	ES2510622	0.65	-	<0.1	<0.02	<0.02	0.22	1.64	<0.02	0.29	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_SW001	0021_SW001_250526	26 May 2025	ES2516045	0.11	-	<0.1	<0.02	<0.02	0.06	0.33	<0.02	0.09	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_SW001	0021_QC101_250707	07 Jul 2025	ES2520608	0.10	-	<0.1	<0.02	<0.02	0.03	0.28	<0.02	0.05	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_SW001	0021_QC201_250707	07 Jul 2025	1242260	0.09 ^{#1}	-	<0.05	<0.01	<0.01	0.05 ^{#1}	0.28	<0.01	0.05	<0.01	<0.01	<0.01	-
Captains Lagoon	Source	0021_SW001	0021_SW001_250707	07 Jul 2025	ES2520608	0.09	-	<0.1	<0.02	<0.02	0.03	0.29	<0.02	0.05	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_SW001	0021_SW001_250805	05 Aug 2025	ES2524252	0.10	-	<0.1	<0.02	<0.02	0.03	0.25	<0.02	0.06	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_SW027	FC_SW11	19 Apr 2017	ES1709535	0.008	-	<0.002	<0.0005	<0.0005	0.0013	0.0102	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-
Captains Lagoon	Source	0021_SW027	0021_SW027_211021	21 Oct 2021	ES2138639	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_SW027	0021_SW027_220406	06 Apr 2022	ES2212442	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_SW027	0021_SW027_221012	12 Oct 2022	ES2237106	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_SW027	0021_SW027_230420	20 Apr 2023	ES2313364	0.09	-	<0.1	<0.02	<0.02	<0.02	0.06	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_SW027	0021_SW027_240410	10 Apr 2024	ES2412012	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Source	0021_SW027	0021_SW027_250401	01 Apr 2025	ES2510622	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW012A	0020_MW12_180410	10 Apr 2018	ES1810721	0.138	-	<0.002	0.0011	<0.0005	0.0264	0.189	0.0059	0.0256	<0.0005	<0.0005	<0.0005	-
Captains Lagoon	Pathway	0020_MW012A	0020_MW12_180503	03 May 2018	ES1812871	0.09	-	<0.1	<0.02	<0.02	0.03	0.19	<0.02	0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW012A	0020_MW012_211015	15 Oct 2021	ES2138638	0.11	-	<0.1	<0.02	<0.02	0.03	0.16	<0.02	0.03	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW012A	0020_MW012_220404	04 Apr 2022	ES2212597	0.02	-	<0.1	<0.02	<0.02	0.03	0.15	<0.02	0.08	<0.05	<0.02	<0.02	-



Appendix B
Table B5b
Historical Water Analytical Results - Captains Lagoon

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Carboxylic Acids												
	Perfluoropentane sulfonic acid (PFPeS)	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluoro-n-hexadecanoic acid (PFHxDA)
	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	0.0005	0.01	0.002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.05
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%													
PFAS NEMP 3.0 2025 Recreational water quality													

Catchment	SPR	Location	Field ID	Date	Lab Report No.													
Captains Lagoon	Pathway	0020_MW012A	0020_MW012_221010	10 Oct 2022	ES2237104	0.05	-	<0.1	<0.02	<0.02	0.03	0.19	<0.02	0.06	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW012A	0020_MW012A_230130	30 Jan 2023	ES2303447	0.07	-	<0.1	<0.02	<0.02	0.03	0.20	<0.02	0.06	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW012A	0020_MW012_250408	08 Apr 2025	ES2510618	0.06	-	<0.1	<0.02	<0.02	0.02	0.10	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW012A	0020_MW012A_251020	20 Oct 2025	ES2533546	0.05	-	<0.1	<0.02	<0.02	0.02	0.14	<0.02	0.03	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW055	0020_MW055_220412	12 Apr 2022	ES2213152	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.05	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW055	0020_MW055_221010	10 Oct 2022	ES2236866	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW055	0020_MW055_230131	31 Jan 2023	ES2303447	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW055	0020_MW055_251020	20 Oct 2025	ES2533546	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW055	0020_QC122_251020	20 Oct 2025	ES2533546	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW055	0020_QC222_251020	20 Oct 2025	1285219	<0.01	-	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-
Captains Lagoon	Pathway	0020_MW056	0020_MW056_220412	12 Apr 2022	ES2213152	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.06	<0.02	0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW056	0020_MW056_221010	10 Oct 2022	ES2236866	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW056	0020_QC122_221010	10 Oct 2022	ES2236866	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW056	0020_MW056_230130	30 Jan 2023	ES2303447	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW056	0020_MW056_241021	21 Oct 2024	ES2435143	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW056	0020_MW056_251020	20 Oct 2025	ES2533546	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW057	0020_MW057_220412	12 Apr 2022	ES2213152	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.18	<0.02	0.06	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW057	0020_MW057_221010	10 Oct 2022	ES2236866	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.09	<0.02	0.04	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW057	0020_MW057_230130	30 Jan 2023	ES2303447	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW057	0020_MW057_241021	21 Oct 2024	ES2435143	0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW057	0020_MW057_250331	31 Mar 2025	ES2510618	0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW057	0020_MW057_251020	20 Oct 2025	ES2533546	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW058	0020_MW058_220412	12 Apr 2022	ES2213152	0.05	-	<0.1	<0.02	<0.02	0.05	0.25	<0.02	0.07	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW058	0020_QC201_220412	12 Apr 2022	880529	<0.05	0.02	<0.05	<0.01	<0.01	0.04	0.20	0.02	0.05	<0.01	<0.01	<0.01	-
Captains Lagoon	Pathway	0020_MW058	0020_MW058_221010	10 Oct 2022	ES2236866	0.02	-	<0.1	<0.02	<0.02	<0.02	0.06	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW058	0020_QC222_221010	10 Oct 2022	931497	0.02 ^{#1}	0.04	<0.05	<0.01	<0.01	0.01 ^{#1}	0.05 ^{#1}	0.01	0.01 ^{#1}	<0.01	<0.01	<0.01	-
Captains Lagoon	Pathway	0020_MW058	0020_MW058_230130	30 Jan 2023	ES2303447	0.04	-	<0.1	<0.02	<0.02	0.05	0.15	<0.02	0.07	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW058	0020_QC200_230130	30 Jan 2023	961653	0.04	-	<0.05	<0.01	<0.01	0.06 ^{#1}	0.16 ^{#1}	0.02	0.06 ^{#1}	<0.01	<0.01	<0.01	-
Captains Lagoon	Pathway	0020_MW058	0020_MW058_241021	21 Oct 2024	ES2435143	0.04	-	<0.1	<0.02	<0.02	0.05	0.13	0.02	0.04	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW058	0020_MW058_250403	03 Apr 2025	ES2510618	0.02	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW058	0020_QC137_250403	03 Apr 2025	ES2510618	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW058	0020_QC237_250403	03 Apr 2025	1209674	0.02	-	<0.05	<0.01	<0.01	0.02	0.03	0.01	<0.01	<0.01	<0.01	<0.01	-
Captains Lagoon	Pathway	0020_MW058	0020_MW058_251020	20 Oct 2025	ES2533546	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW059	0020_MW059_220412	12 Apr 2022	ES2213152	0.03	-	<0.1	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW059	0020_MW059_221010	10 Oct 2022	ES2236866	0.04	-	<0.1	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW059	0020_MW059_230130	30 Jan 2023	ES2303447	0.03	-	<0.1	<0.02	<0.02	0.02	0.10	<0.02	0.04	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW059	0020_QC100_230130	30 Jan 2023	ES2303447	0.03	-	<0.1	<0.02	<0.02	0.02	0.09	<0.02	0.03	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW059	0020_MW059_241021	21 Oct 2024	ES2435143	0.02	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW059	0020_MW059_250331	31 Mar 2025	ES2510618	0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW059	0020_MW059_251020	20 Oct 2025	ES2533546	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW070	0020_MW070_250424	24 Apr 2025	ES2512752	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW070	0020_QC120_250424	24 Apr 2025	ES2512752	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW070	0020_MW070_251020	20 Oct 2025	ES2533546	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW070	0020_QC121_251020	20 Oct 2025	ES2533546	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW070	0020_QC221_251020	20 Oct 2025	1285219	<0.01	-	<0.05	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	-
Captains Lagoon	Pathway	0020_MW071	0020_MW071_250424	24 Apr 2025	ES2512752	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW071	0020_MW071_251020	20 Oct 2025	ES2533546	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW102D	CL_MW02_180410	10 Apr 2018	ES1810721	0.104	-	<0.002	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}	0.0112	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}	-
Captains Lagoon	Pathway	0020_MW102D	CL_QC211_180410	10 Apr 2018	594255	<0.001	-	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-
Captains Lagoon	Pathway	0020_MW102D	CL_MW02_180502	02 May 2018	ES1812871	0.02	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW102D	0020_MW102_211018	18 Oct 2021	ES2138638	0.03	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	-



Appendix B
Table B5b
Historical Water Analytical Results - Captains Lagoon

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
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	PFAS - Perfluoroalkyl Carboxylic Acids												
	Perfluoropentane sulfonic acid (PFPeS)	Perfluoronanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTTrDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluoro-n-hexadecanoic acid (PFHxDA)
	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	0.0005	0.01	0.002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.05
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%													
PFAS NEMP 3.0 2025 Recreational water quality													

Catchment	SPR	Location	Field ID	Date	Lab Report No.													
Captains Lagoon	Pathway	0020_MW102D	0020_MW102_220404	04 Apr 2022	ES2212597	0.04	-	<0.1	<0.02	<0.02	<0.02	0.05	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW102D	0020_MW102_221010	10 Oct 2022	ES2237104	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW102D	0020_QC201_221010	10 Oct 2022	308190	0.02	-	<0.02	<0.02	<0.05	<0.01	0.02	<0.01	<0.02	<0.5	<0.1	<0.02	-
Captains Lagoon	Pathway	0020_MW102D	0020_MW102D_230417	17 Apr 2023	ES2313254	0.03	-	<0.1	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW102D	0020_MW102D_231016	16 Oct 2023	ES2336397	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW102D	0020_QC100_231016	16 Oct 2023	ES2336397	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW102D	0020_QC200_231016	16 Oct 2023	335710	0.03	-	<0.02	<0.02	<0.05	<0.01	0.03	<0.01	<0.02	<0.5	<0.1	<0.02	-
Captains Lagoon	Pathway	0020_MW102D	0020_MW102D_240408	08 Apr 2024	ES2411964	0.02	-	<0.1	<0.02	<0.02	0.02	0.15	<0.02	0.05	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW102D	0020_MW102D_241022	22 Oct 2024	ES2435143	0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW102D	0020_QC253_241022	22 Oct 2024	1154740	0.03	-	<0.05	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	-
Captains Lagoon	Pathway	0020_MW102D	0020_MW102D_250331	31 Mar 2025	ES2510618	0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW102D	0020_MW102D_251020	20 Oct 2025	ES2533546	0.02	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW102S	0020_MW102S_241022	22 Oct 2024	ES2435143	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW102S	0020_MW102S_250331	31 Mar 2025	ES2510618	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW102S	0020_MW102S_251020	20 Oct 2025	ES2533546	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW104	CL_MW04_180410	10 Apr 2018	ES1810721	0.0008	-	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-
Captains Lagoon	Pathway	0020_MW104	0020_MW104_241022	22 Oct 2024	ES2435143	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW104	0020_QC153_241022	22 Oct 2024	ES2435143	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW104	0020_MW104_250403	03 Apr 2025	ES2510618	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW104	0020_QC138_250403	03 Apr 2025	ES2510618	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_MW104	0020_QC238_250403	03 Apr 2025	1209674	<0.01	-	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-
Captains Lagoon	Pathway	0020_MW104	0020_MW104_251020	20 Oct 2025	ES2533546	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_SW011	CL_SW08	18 Apr 2017	ES1709535	0.0167	-	<0.002	<0.0005	<0.0005	0.002	0.0125	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-
Captains Lagoon	Pathway	0020_SW011	JCQA02	18 Apr 2017	ES1709535	0.0163	-	<0.002	<0.0005	<0.0005	0.0019	0.0114	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-
Captains Lagoon	Pathway	0020_SW011	CL_SW08_180501	01 May 2018	ES1812871	0.0432	-	<0.002	<0.0005	<0.0005	0.0051	0.0145	<0.0005	0.0029	<0.0005	<0.0005	<0.0005	-
Captains Lagoon	Pathway	0020_SW011	0020_SW011_211021	21 Oct 2021	ES2138638	0.03	-	<0.1	<0.02	<0.02	<0.02	0.05	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_SW011	0020_SW011_220404	04 Apr 2022	ES2212597	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_SW011	0020_SW011_220707	07 Jul 2022	ES2224472	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_SW011	0020_SW011_221012	10 Oct 2022	ES2236866	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_SW011	0020_SW011_221012	12 Oct 2022	ES2237104	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_SW011	0020_SW011_230201	01 Feb 2023	ES2303447	0.03	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_SW011	0020_SW011_230417	17 Apr 2023	ES2313254	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_SW011	0020_SW011_231016	16 Oct 2023	ES2336397	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_SW011	0020_SW011_240408	08 Apr 2024	ES2411964	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_SW011	0020_SW011_241023	23 Oct 2024	ES2435143	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_SW011	0020_SW011_250402	02 Apr 2025	ES2510618	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_SW011	0020_SW011_251020	20 Oct 2025	ES2533546	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_SW057	0020_QC113_220412	12 Apr 2022	ES2213152	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_SW057	0020_SW057_220412	12 Apr 2022	ES2213152	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_SW057	0020_SW057_220707	07 Jul 2022	ES2224472	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_SW057	0020_SW057_221010	10 Oct 2022	ES2236866	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_SW057	0020_SW057_230130	30 Jan 2023	ES2303447	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.04	<0.02	0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_SW057	0020_SW057_241021	21 Oct 2024	ES2435143	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_SW057	0020_QC100_250331	31 Mar 2025	ES2510618	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_SW057	0020_QC200_250331	31 Mar 2025	1209674	<0.01	-	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-
Captains Lagoon	Pathway	0020_SW057	0020_SW057_250331	31 Mar 2025	ES2510618	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_SW057	0020_QC160_251020	20 Oct 2025	ES2533546	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0020_SW057	0020_QC260_251020	20 Oct 2025	1285219	<0.01	-	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-
Captains Lagoon	Pathway	0020_SW057	0020_SW057_251020	20 Oct 2025	ES2533546	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_MW018	MW018	04 May 2017	ES1711220	0.0277	-	<0.002	<0.0005	<0.0005	0.0023	0.017	<0.0005	0.0049	<0.0005	<0.0005	<0.0005	-
Captains Lagoon	Pathway	0021_MW018	0021_MW018_241022	22 Oct 2024	ES2435078	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-



Appendix B
Table B5b
Historical Water Analytical Results - Captains Lagoon

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Carboxylic Acids												
	Perfluoropentane sulfonic acid (PFPeS)	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTTrDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluoro-n-hexadecanoic acid (PFHxDA)
	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	0.0005	0.01	0.002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.05
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%													
PFAS NEMP 3.0 2025 Recreational water quality													

Catchment	SPR	Location	Field ID	Date	Lab Report No.													
Captains Lagoon	Pathway	0021_MW018	0021_MW018_250402	02 Apr 2025	ES2510113	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_MW018	0021_MW018_251021	21 Oct 2025	ES2533521	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_MW108	A_MW08	08 May 2017	ES1711220	0.375	-	<0.002	<0.0005	<0.0005	0.0345	1.04	<0.0005	0.141	<0.0005	<0.0005	<0.0005	-
Captains Lagoon	Pathway	0021_MW108	0021_MW108_211019	19 Oct 2021	ES2138639	0.26	-	<0.1	<0.02	<0.02	0.06	0.60	<0.02	0.11	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_MW108	0021_MW108_220406	06 Apr 2022	ES2212442	0.25	-	<0.1	<0.02	<0.02	0.07	0.75	<0.02	0.15	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_MW108	0021_MW108_221013	13 Oct 2022	ES2237106	0.27	-	0.1	<0.02	<0.02	0.10	0.78	<0.02	0.18	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_MW108	0021_MW108_230420	20 Apr 2023	ES2313364	0.36	-	0.1	<0.02	<0.02	0.13	1.03	<0.02	0.24	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_MW108	0021_MW108_231018	18 Oct 2023	ES2336398	0.26	-	<0.1	<0.02	<0.02	0.05	0.46	<0.02	0.08	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_MW108	0021_MW108_240411	11 Apr 2024	ES2411994	0.28	-	<0.1	<0.02	<0.02	0.08	0.52	<0.02	0.10	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_MW108	0021_MW108_241028	28 Oct 2024	ES2435541	0.26	-	<0.1	<0.02	<0.02	0.05	0.47	<0.02	0.11	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_MW108	0021_MW108_250404	04 Apr 2025	ES2510113	0.13	-	<0.1	<0.02	<0.02	0.04	0.25	<0.02	0.06	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_MW108	0021_MW108_251023	23 Oct 2025	ES2533521	0.22	-	<0.1	<0.02	<0.02	0.06	0.43	<0.02	0.08	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_MW108	0021_QC166_251023	23 Oct 2025	ES2533538	0.22	-	<0.1	<0.02	<0.02	0.05	0.43	<0.02	0.10	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_MW018	0021_QC266_251023	23 Oct 2025	1285374	0.17 ^{#1}	-	<0.05	<0.01	<0.01	0.07 ^{#1}	0.40	<0.01	0.09	<0.01	<0.01	<0.01	-
Captains Lagoon	Pathway	0021_MW124	CL_MW01	04 May 2017	ES1711220	0.0388	-	<0.002	0.0006	<0.0005	0.0054	0.0286	0.0007	0.0116	<0.0005	<0.0005	<0.0005	-
Captains Lagoon	Pathway	0021_MW124	CL_MW01_180503	03 May 2018	ES1812871	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_MW124	CL_QC114_180503	03 May 2018	ES1812871	0.03	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_MW124	0021_MW124_211020	20 Oct 2021	ES2138639	0.02	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_MW124	0021_MW124_220406	06 Apr 2022	ES2212442	0.03	-	<0.1	<0.02	<0.02	<0.02	0.05	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_MW124	0021_MW124_221011	11 Oct 2022	ES2237106	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_MW124	0021_MW124_230201	01 Feb 2023	ES2303446	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.05	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_MW124	0021_MW124_230417	17 Apr 2023	ES2313364	0.02	-	<0.1	<0.02	<0.02	<0.02	0.05	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_MW124	0021_MW124_231016	16 Oct 2023	ES2336398	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_MW124	0021_MW124_240410	10 Apr 2024	ES2411994	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_MW124	0021_MW124_241022	22 Oct 2024	ES2435078	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_MW124	0021_MW125_250402	02 Apr 2025	ES2510113	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_MW124	0021_MW124_250403	03 Apr 2025	ES2510113	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_MW124	0021_MW124_251023	23 Oct 2025	ES2533521	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_MW134	TC_MW01	04 May 2017	ES1711220	<0.0005	-	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-
Captains Lagoon	Pathway	0021_MW134	0021_MW134_220411	11 Apr 2022	ES2213156	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_MW134	0021_QC200_220411	11 Apr 2022	880531	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-
Captains Lagoon	Pathway	0021_MW134	0021_MW134_221011	11 Oct 2022	ES2236834	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_MW134	0021_MW134_230201	01 Feb 2023	ES2303446	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_MW134	0021_MW134_241024	24 Oct 2024	ES2435541	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_MW134	0021_MW134_250408	08 Apr 2025	ES2510113	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_MW134	0021_MW134_251022	22 Oct 2025	ES2533521	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_SW013	CL_SW09	18 Apr 2017	ES1709535	0.044	-	<0.002	<0.0005	<0.0005	0.005	0.0305	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-
Captains Lagoon	Pathway	0021_SW013	CL_SW09_180430	30 Apr 2018	ES1812871	0.0631	-	<0.002	<0.0005	<0.0005	0.0097	0.0407	0.0013	0.0070	<0.0005	<0.0005	<0.0005	-
Captains Lagoon	Pathway	0021_SW013	0021_SW013_211020	20 Oct 2021	ES2138639	0.04	-	<0.1	<0.02	<0.02	<0.02	0.08	<0.02	0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_SW013	0021_SW013_220406	06 Apr 2022	ES2212442	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.05	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_SW013	0021_SW013_221010	10 Oct 2022	ES2237106	0.02	-	<0.1	<0.02	<0.02	<0.02	0.05	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_SW013	0021_SW013_230417	17 Apr 2023	ES2313364	0.04	-	<0.1	<0.02	<0.02	<0.02	0.05	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_SW013	0021_SW013_231016	16 Oct 2023	ES2336399	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_SW013	0021_QC106_240410	10 Apr 2024	ES2412012	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_SW013	0021_QC206_240410	10 Apr 2024	348825	<0.01	-	<0.02	<0.02	<0.05	<0.01	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02	-
Captains Lagoon	Pathway	0021_SW013	0021_SW013_240410	10 Apr 2024	ES2412012	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_SW013	0021_SW013_241022	22 Oct 2024	ES2435078	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_SW013	0021_SW013_250401	01 Apr 2025	ES2510622	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_SW019	DC_SW04	20 Apr 2017	ES1709644	0.129	-	<0.002	0.0016	<0.0005	0.0252	0.986	0.0016	0.0694	<0.0005	<0.0005	<0.0005	-
Captains Lagoon	Pathway	0021_SW019	0021_SW019_211019	19 Oct 2021	ES2138639	0.04	-	<0.1	<0.02	<0.02	<0.02	0.08	<0.02	0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_SW019	0021_QC203_220405	05 Apr 2022	293031	0.25	-	0.08	<0.02	<0.05	0.08	0.68	0.01	0.2	<0.5	<0.1	<0.02	-



Appendix B
Table B5b
Historical Water Analytical Results - Captains Lagoon

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Carboxylic Acids												
	Perfluoropentane sulfonic acid (PFPeS)	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTTrDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluoro-n-hexadecanoic acid (PFHxDA)
	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	0.0005	0.01	0.002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.05
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%													
PFAS NEMP 3.0 2025 Recreational water quality													

Catchment	SPR	Location	Field ID	Date	Lab Report No.													
Captains Lagoon	Pathway	0021_SW019	0021_SW019_220405	05 Apr 2022	ES2212442	0.23	-	<0.1	<0.02	<0.02	0.08	0.80	<0.02	0.15	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_SW019	0021_SW019_220707	07 Jul 2022	ES2224473	0.18	-	<0.1	<0.02	<0.02	0.06	0.34	<0.02	0.08	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_SW019	0021_SW019_221013	13 Oct 2022	ES2237106	0.18	-	<0.1	<0.02	<0.02	0.06	0.42	<0.02	0.12	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_SW019	0021_SW019_230201	01 Feb 2023	ES2303446	0.28	-	0.1	<0.02	<0.02	0.08	0.65	<0.02	0.24	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_SW019	0021_SW019_230420	20 Apr 2023	ES2313364	0.30	-	<0.1	<0.02	<0.02	0.07	0.51	<0.02	0.15	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_SW019	0021_SW019_240411	11 Apr 2024	ES2412012	0.19	-	<0.1	<0.02	<0.02	0.05	0.32	<0.02	0.08	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_SW019	0021_SW019_250403	03 Apr 2025	ES2510622	0.15	-	<0.1	<0.02	<0.02	0.05	0.30	<0.02	0.11	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_SW021	DC_SW06	13 Apr 2017	ES1709064	0.191	-	<0.002	0.0039	<0.0005	0.0420	0.229	0.0042	0.0261	<0.0005	<0.0005	0.0010	-
Captains Lagoon	Pathway	0021_SW021	0021_SW021_211020	20 Oct 2021	ES2138639	0.19	-	<0.1	<0.02	<0.02	0.04	0.29	<0.02	0.07	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_SW021	0021_SW021_220406	06 Apr 2022	ES2212442	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_SW021	0021_SW021_220707	07 Jul 2022	ES2224473	0.04	-	<0.1	<0.02	<0.02	<0.02	0.08	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_SW021	0021_SW021_221014	14 Oct 2022	ES2237106	0.04	-	<0.1	<0.02	<0.02	<0.02	0.14	<0.02	0.04	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_SW021	0021_SW021_240412	12 Apr 2024	ES2412012	0.10	-	<0.1	<0.02	<0.02	0.03	0.14	<0.02	0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_SW021	0021_QC106_250402	02 Apr 2025	ES2510113	0.02	-	<0.1	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Pathway	0021_SW021	0021_QC206_250402	02 Apr 2025	1210052	0.03	-	<0.05	<0.01	<0.01	<0.01	0.05	<0.01	0.02	<0.01	<0.01	<0.01	-
Captains Lagoon	Pathway	0021_SW021	0021_SW021_250402	02 Apr 2025	ES2510622	0.03	-	<0.1	<0.02	<0.02	<0.02	0.05	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW004	CL_SW01	18 Apr 2017	ES1709535	0.01	-	<0.002	<0.0005	<0.0005	0.0009	0.0044	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-
Captains Lagoon	Receptor	0020_SW004	CL_SW01_180501	01 May 2018	ES1812871	0.0279	-	<0.002	<0.0005	<0.0005	0.0091	0.0529	0.0008	0.0172	<0.0005	<0.0005	<0.0005	-
Captains Lagoon	Receptor	0020_SW004	0020_SW004_211018	18 Oct 2021	ES2138638	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW004	0020_SW004_220404	04 Apr 2022	ES2212597	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW004	0020_SW004_220101	07 Jul 2022	ES2224472	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW004	0020_SW004_221011	11 Oct 2022	ES2237104	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW004	0020_SW004_230130	30 Jan 2023	ES2303447	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW004	0020_SW004_230417	17 Apr 2023	ES2313254	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW004	0020_SW004_231016	16 Oct 2023	ES2336397	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW004	0020_SW004_240408	08 Apr 2024	ES2411964	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW004	0020_SW004_241025	25 Oct 2024	ES2435539	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW004	0020_SW004_250331	31 Mar 2025	ES2510618	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW004	0020_SW004_251020	20 Oct 2025	ES2533546	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW005	CL_SW02	18 Apr 2017	ES1709535	0.0172	-	<0.002	0.0009	<0.0005	0.0018	0.0104	0.0006	<0.0005	<0.0005	<0.0005	<0.0005	-
Captains Lagoon	Receptor	0020_SW005	CL_SW02_180501	01 May 2018	ES1812871	0.0281	-	<0.002	<0.0005	<0.0005	0.0094	0.0545	0.0007	0.0192	<0.0005	<0.0005	<0.0005	-
Captains Lagoon	Receptor	0020_SW005	0020_SW005_211018	18 Oct 2021	ES2138638	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW005	0020_SW005_220404	04 Apr 2022	ES2212597	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW005	0020_SW005_221011	11 Oct 2022	ES2237104	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW005	0020_SW005_230417	17 Apr 2023	ES2313254	0.04	-	0.2	<0.02	<0.02	0.02	0.12	<0.02	0.04	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW005	0020_SW005_231016	16 Oct 2023	ES2336397	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW005	0020_SW005_240408	08 Apr 2024	ES2411964	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW005	0020_SW005_241025	25 Oct 2024	ES2435539	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW005	0020_SW005_250331	31 Mar 2025	ES2510618	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW005	0020_SW005_251020	20 Oct 2025	ES2533546	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW010	CL_SW07	18 Apr 2017	ES1709535	0.0153	-	<0.002	<0.0005	<0.0005	0.0015	0.0092	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-
Captains Lagoon	Receptor	0020_SW010	CL_QC221_180501	01 May 2018	597346	0.02 ^{#1}	-	<0.05	<0.01	<0.01	<0.01 ^{#1}	0.05 ^{#1}	<0.01	0.02 ^{#1}	<0.01	<0.01	<0.01	-
Captains Lagoon	Receptor	0020_SW010	CL_SW07_180501	01 May 2018	ES1812871	0.0276	-	<0.002	<0.0005	<0.0005	0.0094	0.0540	0.0009	0.0182	<0.0005	<0.0005	<0.0005	-
Captains Lagoon	Receptor	0020_SW010	0020_SW010_211018	18 Oct 2021	ES2138638	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW010	0020_SW010_220404	04 Apr 2022	ES2212597	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW010	0020_SW010_220101	07 Jul 2022	ES2224472	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW010	0020_SW010_221012	10 Oct 2022	ES2236866	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW010	0020_SW010_221012	12 Oct 2022	ES2237104	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW010	0020_QC120_230130	30 Jan 2023	ES2303447	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW010	0020_SW010_230130	30 Jan 2023	ES2303447	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW010	0020_SW010_230417	17 Apr 2023	ES2313254	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-



	PFAS - Perfluoroalkyl Carboxylic Acids												
	Perfluoropentane sulfonic acid (PFPeS)	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTTrDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluoro-n-hexadecanoic acid (PFHxDA)
	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	0.0005	0.01	0.002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.05
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%													
PFAS NEMP 3.0 2025 Recreational water quality													

Catchment	SPR	Location	Field ID	Date	Lab Report No.													
Captains Lagoon	Receptor	0020_SW010	0020_SW010_231016	16 Oct 2023	ES2336397	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW010	0020_SW010_240408	08 Apr 2024	ES2411964	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW010	0020_QC110_241025	25 Oct 2024	ES2435539	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW010	0020_QC210_241025	25 Oct 2024	1156671	<0.01	-	<0.05	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-
Captains Lagoon	Receptor	0020_SW010	0020_SW010_241025	25 Oct 2024	ES2435539	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW010	0020_SW010_250331	31 Mar 2025	ES2510618	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW010	0020_SW010_251020	20 Oct 2025	ES2533546	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW012	CL_QC206_180326	26 Mar 2018	592055	<0.001	-	<0.005	<0.001	<0.001	<0.001	0.001 ^{#1}	<0.001	<0.001	<0.001	<0.001	<0.001	-
Captains Lagoon	Receptor	0020_SW012	CL_SW12_180326	26 Mar 2018	ES1809241	<0.0005	-	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-
Captains Lagoon	Receptor	0020_SW012	CL_SW12_180515	15 May 2018	ES1814324	<0.0005	-	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-
Captains Lagoon	Receptor	0020_SW012	0020_SW012_211018	18 Oct 2021	ES2138638	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW012	0020_SW012_220404	04 Apr 2022	ES2212597	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW012	0020_SW012_221011	11 Oct 2022	ES2237104	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW012	0020_SW012_230417	17 Apr 2023	ES2313254	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW012	0020_SW012_231016	16 Oct 2023	ES2336397	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW012	0020_QC104_240408	08 Apr 2024	ES2411964	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW012	0020_QC204_240408	08 Apr 2024	348827	<0.01	-	<0.02	<0.02	<0.05	<0.01	0.02	<0.01	<0.02	<0.5	<0.1	<0.02	-
Captains Lagoon	Receptor	0020_SW012	0020_SW012_240408	08 Apr 2024	ES2411964	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW012	0020_SW012_241025	25 Oct 2024	ES2435539	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW012	0020_SW012_250331	31 Mar 2025	ES2510618	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Captains Lagoon	Receptor	0020_SW012	0020_SW012_251020	20 Oct 2025	ES2533546	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-

Statistics														
Number of Results	378	5	378	378	378	378	378	378	378	378	378	378	378	2
Number of Detects	192	3	30	13	0	126	239	29	139	0	0	1	0	
Minimum Concentration	<0.0005	<0.01	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.05	
Minimum Detect	0.0008	0.02	0.03	0.0006	ND	0.0006	0.001	0.0005	0.002	ND	ND	0.001	ND	
Maximum Concentration	2.7	0.04	0.8	0.05	<0.05	2.2	10.7	0.07	1.44	<0.5	<0.1	<0.02	<0.05	
Maximum Detect	2.7	0.04	0.8	0.05	ND	2.2	10.7	0.07	1.44	ND	ND	0.001	ND	
Average Concentration *	0.099	0.02	0.055	0.0093	0.0093	0.045	0.26	0.0099	0.051	0.029	0.01	0.0088	0.025	
Geometric Average *	0.026	0.014	0.035	0.0072	0.0071	0.014	0.041	0.0075	0.016	0.016	0.0072	0.0069	0.025	
Median Concentration *	0.01	0.02	0.05	0.01	0.01	0.01	0.03	0.01	0.01	0.025	0.01	0.01	0.025	
Standard Deviation *	0.26	0.015	0.068	0.0048	0.0041	0.18	0.92	0.0076	0.14	0.041	0.0078	0.003	0	
Geometric Standard Deviation *	4.6	2.7	3.4	2.7	2.9	3.5	6.4	2.7	4.2	4.2	3	2.8	1	
95% UCL (Student's-t) *	0.121	0.0347	0.0608	0.00969	0.00962	0.06	0.342	0.0105	0.063	0.0321	0.0107	0.00905	0.025	
Number of Env Standard Exceedances	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	
% of Detects	51	60	8	3	0	33	63	8	37	0	0	0	0	
% of Non-Detects	49	40	92	97	100	67	37	92	63	100	100	100	100	
% of Detects at or above Env Standards	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	

* 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 Reported Analyte LOR is higher than Requested Analyte LOR

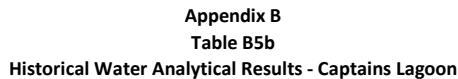


Appendix B
Table B5b
Historical Water Analytical Results - Captains Lagoon

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

EQL	PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
	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
	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%											
PFAS NEMP 3.0 2025 Recreational water quality											

Catchment	SPR	Location	Field ID	Date	Lab Report No.											
Captains Lagoon	Source	0020_MW052	0020_MW052_211221	21 Dec 2021	ES2147062	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0020_MW052	0020_MW052_250331	31 Mar 2025	ES2510618	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0020_MW052	0020_MW052_251020	20 Oct 2025	ES2533546	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW028	MW028	03 May 2017	ES1710866	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Captains Lagoon	Source	0021_MW028	0021_MW028_211020	20 Oct 2021	ES2138639	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW028	0021_QC103_211020	20 Oct 2021	ES2138639	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW028	0021_MW028_220406	06 Apr 2022	ES2212442	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW028	0021_QC204_220406	06 Apr 2022	293031	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Captains Lagoon	Source	0021_MW028	0021_MW028_221014	14 Oct 2022	ES2237106	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW028	0021_MW028_230421	21 Apr 2023	ES2313364	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW028	0021_MW028_231019	19 Oct 2023	ES2336398	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW028	0021_MW028_240412	12 Apr 2024	ES2411994	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW028	0021_MW028_241022	22 Oct 2024	ES2435078	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW028	0021_QC103_241022	22 Oct 2024	ES2435078	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW028	0021_QC203_241022	22 Oct 2024	1154751	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Captains Lagoon	Source	0021_MW028	0021_MW028_250402	02 Apr 2025	ES2510113	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW028	0021_MW028_251021	21 Oct 2025	ES2533521	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW028	0021_QC123_251021	21 Oct 2025	ES2533538	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW028	0021_QC223_251021	21 Oct 2025	1285374	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Captains Lagoon	Source	0021_MW030	MW030	03 May 2017	ES1710866	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Captains Lagoon	Source	0021_MW030	0021_MW030_211021	21 Oct 2021	ES2138639	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW030	0021_MW030_220406	06 Apr 2022	ES2212442	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW030	0021_MW030_221014	14 Oct 2022	ES2237106	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW030	0021_MW030_230419	19 Apr 2023	ES2313364	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW030	0021_MW030_231018	18 Oct 2023	ES2336398	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW030	0021_MW030_240410	10 Apr 2024	ES2411994	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW030	0021_MW030_241024	24 Oct 2024	ES2435541	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW030	0021_MW030_250403	03 Apr 2025	ES2510113	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW030	0021_QC255_250403	03 Apr 2025	1210052	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Captains Lagoon	Source	0021_MW030	0021_MW030_251022	22 Oct 2025	ES2533521	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW062	0021_MW062_210621	21 Jun 2021	ES2123994	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	0.16	<0.05	<0.05
Captains Lagoon	Source	0021_MW062	0021_QC113_210621	21 Jun 2021	ES2123994	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	0.18	<0.05	<0.05
Captains Lagoon	Source	0021_MW062	0021_MW062_240411	11 Apr 2024	ES2411994	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW062	0021_MW062_241024	24 Oct 2024	ES2435541	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW062	0021_QC157_241025	25 Oct 2024	ES2435541	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW062	0021_MW062_250129	29 Jan 2025	ES2503552	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	0.08	<0.05	<0.05
Captains Lagoon	Source	0021_MW062	0021_MW062_250424	24 Apr 2025	ES2512435	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW062	0021_MW062_251022	22 Oct 2025	ES2533521	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW102	A_MW02	01 May 2017	ES1710866	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	0.003	<0.001	<0.001
Captains Lagoon	Source	0021_MW102	0021_MW102_211019	19 Oct 2021	ES2138639	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW102	0021_QC201_211019	19 Oct 2021	281322	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Captains Lagoon	Source	0021_MW102	0021_MW102_220405	05 Apr 2022	ES2212442	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW102	0021_MW102_221013	13 Oct 2022	ES2237106	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW102	0021_MW102_230420	20 Apr 2023	ES2313364	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW102	0021_QC109_230420	20 Apr 2023	ES2313364	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW102	0021_QC209_230420	20 Apr 2023	321517	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Captains Lagoon	Source	0021_MW102	0021_MW102_231019	19 Oct 2023	ES2336398	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW102	0021_MW102_240410	10 Apr 2024	ES2411994	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW102	0021_MW102_241024	24 Oct 2024	ES2435541	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW102	0021_MW102_250404	04 Apr 2025	ES2510113	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW102	0021_MW102_251022	22 Oct 2025	ES2533521	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05



Catchment	SPR	Location	Field ID	Date	Lab Report No.											
Captains Lagoon	Source	0021_MW109	A_MW09	08 May 2017	ES1711220	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Captains Lagoon	Source	0021_MW109	0021_MW109_211019	19 Oct 2021	ES2138639	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW109	0021_MW109_220406	06 Apr 2022	ES2212442	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW109	0021_MW109_221013	13 Oct 2022	ES2237106	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW109	0021_QC209_221013	13 Oct 2022	308187	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Captains Lagoon	Source	0021_MW109	0021_MW109_230420	20 Apr 2023	ES2313364	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW109	0021_MW109_231018	18 Oct 2023	ES2336398	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW109	0021_MW109_240410	10 Apr 2024	ES2411994	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW109	0021_MW109_241024	24 Oct 2024	ES2435541	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW109	0021_QC256_241024	24 Oct 2024	1156146	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Captains Lagoon	Source	0021_MW109	0021_MW109_250131	31 Jan 2025	ES2503552	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW109	0021_MW109_250403	03 Apr 2025	ES2510113	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW109	0021_MW109_251022	22 Oct 2025	ES2533521	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW119	C_MW03	03 May 2017	ES1710866	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Captains Lagoon	Source	0021_MW119	0021_MW119_211020	20 Oct 2021	ES2138639	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW119	0021_QC202_211020	20 Oct 2021	281322	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Captains Lagoon	Source	0021_MW119	0021_MW119_220406	06 Apr 2022	ES2212442	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW119	0021_MW119_221011	11 Oct 2022	ES2237106	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW119	0021_MW119_230203	03 Feb 2023	ES2303695	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW119	0021_MW119_230421	21 Apr 2023	ES2313364	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.

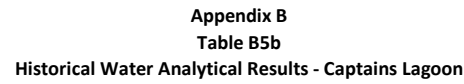


Appendix B
Table B5b
Historical Water Analytical Results - Captains Lagoon

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

EQL	PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
	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
	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%											
PFAS NEMP 3.0 2025 Recreational water quality											

Catchment	SPR	Location	Field ID	Date	Lab Report No.											
Captains Lagoon	Source	0021_MW123	0021_MW123_211026	26 Oct 2021	ES2138639	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW123	0021_MW123_220406	06 Apr 2022	ES2212442	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW123	0021_MW123_221014	14 Oct 2022	ES2237106	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW123	0021_MW123_230421	21 Apr 2023	ES2313364	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW123	0021_MW123_231019	19 Oct 2023	ES2336398	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW123	0021_MW123_240412	12 Apr 2024	ES2411994	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW123	0021_MW123_241022	22 Oct 2024	ES2435078	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW123	0021_MW123_250402	02 Apr 2025	ES2510113	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW123	0021_MW123_251021	21 Oct 2025	ES2533521	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW127	FC_MW03	04 May 2017	ES1711220	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Captains Lagoon	Source	0021_MW127	0021_MW127_220411	11 Apr 2022	ES2213156	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW127	0021_MW127_221011	11 Oct 2022	ES2236834	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW127	0021_QC225_221012	11 Oct 2022	931500	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Captains Lagoon	Source	0021_MW127	0021_MW127_230201	01 Feb 2023	ES2303446	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW127	0021_QC102_230201	01 Feb 2023	ES2303446	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW127	0021_MW127_241024	24 Oct 2024	ES2435541	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW127	0021_MW127_250402	02 Apr 2025	ES2510113	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_MW127	0021_MW127_251022	22 Oct 2025	ES2533521	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_SW001	AB_SW01	20 Apr 2017	ES1709644	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.0130	<0.001	0.007	<0.001	<0.001
Captains Lagoon	Source	0021_SW001	0021_QC101_211019	19 Oct 2021	ES2138639	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	0.02	<0.05	0.23	<0.05	<0.05
Captains Lagoon	Source	0021_SW001	0021_SW001_211019	19 Oct 2021	ES2138639	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	0.02	<0.05	0.23	<0.05	<0.05
Captains Lagoon	Source	0021_SW001	0021_QC101_220405	05 Apr 2022	ES2212442	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_SW001	0021_SW001_220405	05 Apr 2022	ES2212442	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_SW001	0021_QC101_220707	07 Jul 2022	ES2224473	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_SW001	0021_QC201_220707	07 Jul 2022	905309	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Captains Lagoon	Source	0021_SW001	0021_SW001_220101	07 Jul 2022	ES2224473	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_SW001	0021_SW001_221011	11 Oct 2022	ES2236834	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_SW001	0021_SW001_221013	13 Oct 2022	ES2237106	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_SW001	0021_SW001_230201	01 Feb 2023	ES2303446	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_SW001	0021_SW001_230420	20 Apr 2023	ES2313364	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_SW001	0021_SW001_230807	07 Aug 2023	ES2326593	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_SW001	0021_SW001_231004	04 Oct 2023	ES2334226	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_SW001	0021_SW001_231018	18 Oct 2023	ES2336399	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_SW001	0021_SW001_240410	10 Apr 2024	ES2412012	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_SW001	0021_SW001_250403	03 Apr 2025	ES2510622	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_SW001	0021_SW001_250526	26 May 2025	ES2516045	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_SW001	0021_QC101_250707	07 Jul 2025	ES2520608	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_SW001	0021_QC201_250707	07 Jul 2025	1242260	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Captains Lagoon	Source	0021_SW001	0021_SW001_250707	07 Jul 2025	ES2520608	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_SW001	0021_SW001_250805	05 Aug 2025	ES2524252	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_SW027	FC_SW11	19 Apr 2017	ES1709535	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Captains Lagoon	Source	0021_SW027	0021_SW027_211021	21 Oct 2021	ES2138639	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_SW027	0021_SW027_220406	06 Apr 2022	ES2212442	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_SW027	0021_SW027_221012	12 Oct 2022	ES2237106	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_SW027	0021_SW027_230420	20 Apr 2023	ES2313364	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_SW027	0021_SW027_240410	10 Apr 2024	ES2412012	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Source	0021_SW027	0021_SW027_250401	01 Apr 2025	ES2510622	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW012A	0020_MW12_180410	10 Apr 2018	ES1810721	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Captains Lagoon	Pathway	0020_MW012A	0020_MW12_180503	03 May 2018	ES1812871	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW012A	0020_MW012_211015	15 Oct 2021	ES2138638	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW012A	0020_MW012_220404	04 Apr 2022	ES2212597	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05



Catchment	SPR	Location	Field ID	Date	Lab Report No.											
Captains Lagoon	Pathway	0020_MW012A	0020_MW012_221010	10 Oct 2022	ES2237104		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW012A	0020_MW012A_230130	30 Jan 2023	ES2303447		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW012A	0020_MW012_250408	08 Apr 2025	ES2510618		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW012A	0020_MW012A_251020	20 Oct 2025	ES2533546		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW055	0020_MW055_220412	12 Apr 2022	ES2213152		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW055	0020_MW055_221010	10 Oct 2022	ES2236866		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW055	0020_MW055_230131	31 Jan 2023	ES2303447		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW055	0020_MW055_251020	20 Oct 2025	ES2533546		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW055	0020_QC122_251020	20 Oct 2025	ES2533546		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW055	0020_QC222_251020	20 Oct 2025	1285219		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01
Captains Lagoon	Pathway	0020_MW056	0020_MW056_220412	12 Apr 2022	ES2213152		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW056	0020_MW056_221010	10 Oct 2022	ES2236866		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW056	0020_QC122_221010	10 Oct 2022	ES2236866		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW056	0020_MW056_230130	30 Jan 2023	ES2303447		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW056	0020_MW056_241021	21 Oct 2024	ES2435143		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW056	0020_MW056_251020	20 Oct 2025	ES2533546		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW057	0020_MW057_220412	12 Apr 2022	ES2213152		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW057	0020_MW057_221010	10 Oct 2022	ES2236866		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW057	0020_MW057_230130	30 Jan 2023	ES2303447		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	0.07	<0.05
Captains Lagoon	Pathway	0020_MW057	0020_MW057_241021	21 Oct 2024	ES2435143		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW057	0020_MW057_250331	31 Mar 2025	ES2510618		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW057	0020_MW057_251020	20 Oct 2025	ES2533546		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW058	0020_MW058_220412	12 Apr 2022	ES2213152		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW058	0020_QC201_220412	12 Apr 2022	880529		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01
Captains Lagoon	Pathway	0020_MW058	0020_MW058_221010	10 Oct 2022	ES2236866		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW058	0020_QC222_221010	10 Oct 2022	931497		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01
Captains Lagoon	Pathway	0020_MW058	0020_MW058_230130	30 Jan 2023	ES2303447		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW058	0020_QC200_230130	30 Jan 2023	961653		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01
Captains Lagoon	Pathway	0020_MW058	0020_MW058_241021	21 Oct 2024	ES2435143		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW058	0020_MW058_250403	03 Apr 2025	ES2510618		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW058	0020_QC137_250403	03 Apr 2025	ES2510618		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW058	0020_QC237_250403	03 Apr 2025	1209674		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01
Captains Lagoon	Pathway	0020_MW058	0020_MW058_251020	20 Oct 2025	ES2533546		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW059	0020_MW059_220412	12 Apr 2022	ES2213152		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW059	0020_MW059_221010	10 Oct 2022	ES2236866		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW059	0020_MW059_230130	30 Jan 2023	ES2303447		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW059	0020_QC100_230130	30 Jan 2023	ES2303447		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW059	0020_MW059_241021	21 Oct 2024	ES2435143		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW059	0020_MW059_250331	31 Mar 2025	ES2510618		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW059	0020_MW059_251020	20 Oct 2025	ES2533546		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW070	0020_MW070_250424	24 Apr 2025	ES2512752		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW070	0020_QC120_250424	24 Apr 2025	ES2512752		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW070	0020_MW070_251020	20 Oct 2025	ES2533546		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW070	0020_QC121_251020	20 Oct 2025	ES2533546		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW070	0020_QC221_251020	20 Oct 2025	1285219		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01
Captains Lagoon	Pathway	0020_MW071	0020_MW071_250424	24 Apr 2025	ES2512752		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW071	0020_MW071_251020	20 Oct 2025	ES2533546		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW102D	CL_MW02_180410	10 Apr 2018	ES1810721		<0.005 ^{#2}	<0.0020 ^{#2}	<0.005 ^{#2}	<0.005 ^{#2}	<0.0020 ^{#2}	<0.005 ^{#2}	<0.0020 ^{#2}	<0.002 ^{#2}	<0.002 ^{#2}	<0.002 ^{#2}
Captains Lagoon	Pathway	0020_MW102D	CL_QC211_180410	10 Apr 2018	594255		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	0.001
Captains Lagoon	Pathway	0020_MW102D	CL_MW02_180502	02 May 2018	ES1812871		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW102D	0020_MW102_211018	18 Oct 2021	ES2138638		<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05



Appendix B
Table B5b
Historical Water Analytical Results - Captains Lagoon

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
	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
EQL	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%											
PFAS NEMP 3.0 2025 Recreational water quality											

Catchment	SPR	Location	Field ID	Date	Lab Report No.											
Captains Lagoon	Pathway	0020_MW102D	0020_MW102_220404	04 Apr 2022	ES2212597	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW102D	0020_MW102_221010	10 Oct 2022	ES2237104	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW102D	0020_QC201_221010	10 Oct 2022	308190	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Captains Lagoon	Pathway	0020_MW102D	0020_MW102D_230417	17 Apr 2023	ES2313254	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW102D	0020_MW102D_231016	16 Oct 2023	ES2336397	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW102D	0020_QC100_231016	16 Oct 2023	ES2336397	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW102D	0020_QC200_231016	16 Oct 2023	335710	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Captains Lagoon	Pathway	0020_MW102D	0020_MW102D_240408	08 Apr 2024	ES2411964	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW102D	0020_MW102D_241022	22 Oct 2024	ES2435143	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW102D	0020_QC253_241022	22 Oct 2024	1154740	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Captains Lagoon	Pathway	0020_MW102D	0020_MW102D_250331	31 Mar 2025	ES2510618	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW102D	0020_MW102D_251020	20 Oct 2025	ES2533546	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW102S	0020_MW102S_241022	22 Oct 2024	ES2435143	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW102S	0020_MW102S_250331	31 Mar 2025	ES2510618	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW102S	0020_MW102S_251020	20 Oct 2025	ES2533546	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW104	CL_MW04_180410	10 Apr 2018	ES1810721	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Captains Lagoon	Pathway	0020_MW104	0020_MW104_241022	22 Oct 2024	ES2435143	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW104	0020_QC153_241022	22 Oct 2024	ES2435143	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW104	0020_MW104_250403	03 Apr 2025	ES2510618	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW104	0020_QC138_250403	03 Apr 2025	ES2510618	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_MW104	0020_QC238_250403	03 Apr 2025	1209674	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Captains Lagoon	Pathway	0020_MW104	0020_MW104_251020	20 Oct 2025	ES2533546	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_SW011	CL_SW08	18 Apr 2017	ES1709535	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Captains Lagoon	Pathway	0020_SW011	JCQA02	18 Apr 2017	ES1709535	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Captains Lagoon	Pathway	0020_SW011	CL_SW08_180501	01 May 2018	ES1812871	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	0.002	<0.001	<0.001
Captains Lagoon	Pathway	0020_SW011	0020_SW011_211021	21 Oct 2021	ES2138638	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_SW011	0020_SW011_220404	04 Apr 2022	ES2212597	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_SW011	0020_SW011_220707	07 Jul 2022	ES2224472	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_SW011	0020_SW011_221012	10 Oct 2022	ES2236866	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_SW011	0020_SW011_221012	12 Oct 2022	ES2237104	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_SW011	0020_SW011_230201	01 Feb 2023	ES2303447	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_SW011	0020_SW011_230417	17 Apr 2023	ES2313254	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_SW011	0020_SW011_231016	16 Oct 2023	ES2336397	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_SW011	0020_SW011_240408	08 Apr 2024	ES2411964	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_SW011	0020_SW011_241023	23 Oct 2024	ES2435143	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_SW011	0020_SW011_250402	02 Apr 2025	ES2510618	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_SW011	0020_SW011_251020	20 Oct 2025	ES2533546	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_SW057	0020_QC113_220412	12 Apr 2022	ES2213152	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_SW057	0020_SW057_220412	12 Apr 2022	ES2213152	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_SW057	0020_SW057_220707	07 Jul 2022	ES2224472	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_SW057	0020_SW057_221010	10 Oct 2022	ES2236866	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_SW057	0020_SW057_230130	30 Jan 2023	ES2303447	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_SW057	0020_SW057_241021	21 Oct 2024	ES2435143	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_SW057	0020_QC100_250331	31 Mar 2025	ES2510618	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_SW057	0020_QC200_250331	31 Mar 2025	1209674	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Captains Lagoon	Pathway	0020_SW057	0020_SW057_250331	31 Mar 2025	ES2510618	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_SW057	0020_QC160_251020	20 Oct 2025	ES2533546	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0020_SW057	0020_QC260_251020	20 Oct 2025	1285219	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Captains Lagoon	Pathway	0020_SW057	0020_SW057_251020	20 Oct 2025	ES2533546	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_MW018	MW018	04 May 2017	ES1711220	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Captains Lagoon	Pathway	0021_MW018	0021_MW018_241022	22 Oct 2024	ES2435078	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05



Appendix B
Table B5b
Historical Water Analytical Results - Captains Lagoon

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

EQL	PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
	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
	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%											
PFAS NEMP 3.0 2025 Recreational water quality											

Catchment	SPR	Location	Field ID	Date	Lab Report No.											
Captains Lagoon	Pathway	0021_MW018	0021_MW018_250402	02 Apr 2025	ES2510113	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_MW018	0021_MW018_251021	21 Oct 2025	ES2533521	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_MW108	A_MW08	08 May 2017	ES1711220	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Captains Lagoon	Pathway	0021_MW108	0021_MW108_211019	19 Oct 2021	ES2138639	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_MW108	0021_MW108_220406	06 Apr 2022	ES2212442	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_MW108	0021_MW108_221013	13 Oct 2022	ES2237106	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_MW108	0021_MW108_230420	20 Apr 2023	ES2313364	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_MW108	0021_MW108_231018	18 Oct 2023	ES2336398	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_MW108	0021_MW108_240411	11 Apr 2024	ES2411994	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_MW108	0021_MW108_241028	28 Oct 2024	ES2435541	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_MW108	0021_MW108_250404	04 Apr 2025	ES2510113	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_MW108	0021_MW108_251023	23 Oct 2025	ES2533521	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_MW108	0021_QC166_251023	23 Oct 2025	ES2533538	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_MW018	0021_QC266_251023	23 Oct 2025	1285374	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Captains Lagoon	Pathway	0021_MW124	CL_MW01	04 May 2017	ES1711220	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Captains Lagoon	Pathway	0021_MW124	CL_MW01_180503	03 May 2018	ES1812871	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_MW124	CL_QC114_180503	03 May 2018	ES1812871	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_MW124	0021_MW124_211020	20 Oct 2021	ES2138639	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_MW124	0021_MW124_220406	06 Apr 2022	ES2212442	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_MW124	0021_MW124_221011	11 Oct 2022	ES2237106	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_MW124	0021_MW124_230201	01 Feb 2023	ES2303446	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_MW124	0021_MW124_230417	17 Apr 2023	ES2313364	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_MW124	0021_MW124_231016	16 Oct 2023	ES2336398	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_MW124	0021_MW124_240410	10 Apr 2024	ES2411994	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_MW124	0021_MW124_241022	22 Oct 2024	ES2435078	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_MW124	0021_MW125_250402	02 Apr 2025	ES2510113	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_MW124	0021_MW124_250403	03 Apr 2025	ES2510113	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_MW124	0021_MW124_251023	23 Oct 2025	ES2533521	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_MW134	TC_MW01	04 May 2017	ES1711220	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Captains Lagoon	Pathway	0021_MW134	0021_MW134_220411	11 Apr 2022	ES2213156	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_MW134	0021_QC200_220411	11 Apr 2022	880531	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Captains Lagoon	Pathway	0021_MW134	0021_MW134_221011	11 Oct 2022	ES2236834	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_MW134	0021_MW134_230201	01 Feb 2023	ES2303446	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_MW134	0021_MW134_241024	24 Oct 2024	ES2435541	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_MW134	0021_MW134_250408	08 Apr 2025	ES2510113	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_MW134	0021_MW134_251022	22 Oct 2025	ES2533521	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_SW013	CL_SW09	18 Apr 2017	ES1709535	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Captains Lagoon	Pathway	0021_SW013	CL_SW09_180430	30 Apr 2018	ES1812871	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	0.004	<0.001	<0.001
Captains Lagoon	Pathway	0021_SW013	0021_SW013_211020	20 Oct 2021	ES2138639	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_SW013	0021_SW013_220406	06 Apr 2022	ES2212442	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_SW013	0021_SW013_221010	10 Oct 2022	ES2237106	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_SW013	0021_SW013_230417	17 Apr 2023	ES2313364	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_SW013	0021_SW013_231016	16 Oct 2023	ES2336399	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_SW013	0021_QC106_240410	10 Apr 2024	ES2412012	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_SW013	0021_QC206_240410	10 Apr 2024	348825	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Captains Lagoon	Pathway	0021_SW013	0021_SW013_240410	10 Apr 2024	ES2412012	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_SW013	0021_SW013_241022	22 Oct 2024	ES2435078	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_SW013	0021_SW013_250401	01 Apr 2025	ES2510622	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_SW019	DC_SW04	20 Apr 2017	ES1709644	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.0051	<0.001	0.003	<0.001	<0.001
Captains Lagoon	Pathway	0021_SW019	0021_SW019_211019	19 Oct 2021	ES2138639	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_SW019	0021_QC203_220405	05 Apr 2022	293031	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02



Appendix B
Table B5b
Historical Water Analytical Results - Captains Lagoon

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
	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
EQL	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%											
PFAS NEMP 3.0 2025 Recreational water quality											

Catchment	SPR	Location	Field ID	Date	Lab Report No.											
Captains Lagoon	Pathway	0021_SW019	0021_SW019_220405	05 Apr 2022	ES2212442	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_SW019	0021_SW019_220707	07 Jul 2022	ES2224473	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_SW019	0021_SW019_221013	13 Oct 2022	ES2237106	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_SW019	0021_SW019_230201	01 Feb 2023	ES2303446	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_SW019	0021_SW019_230420	20 Apr 2023	ES2313364	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_SW019	0021_SW019_240411	11 Apr 2024	ES2412012	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_SW019	0021_SW019_250403	03 Apr 2025	ES2510622	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_SW021	DC_SW06	13 Apr 2017	ES1709064	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.0038	<0.001	<0.001	<0.001	<0.001
Captains Lagoon	Pathway	0021_SW021	0021_SW021_211020	20 Oct 2021	ES2138639	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_SW021	0021_SW021_220406	06 Apr 2022	ES2212442	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_SW021	0021_SW021_220707	07 Jul 2022	ES2224473	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_SW021	0021_SW021_221014	14 Oct 2022	ES2237106	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_SW021	0021_SW021_240412	12 Apr 2024	ES2412012	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_SW021	0021_QC106_250402	02 Apr 2025	ES2510113	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Pathway	0021_SW021	0021_QC206_250402	02 Apr 2025	1210052	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Captains Lagoon	Pathway	0021_SW021	0021_SW021_250402	02 Apr 2025	ES2510622	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW004	CL_SW01	18 Apr 2017	ES1709535	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Captains Lagoon	Receptor	0020_SW004	CL_SW01_180501	01 May 2018	ES1812871	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	0.001	<0.001	<0.001
Captains Lagoon	Receptor	0020_SW004	0020_SW004_211018	18 Oct 2021	ES2138638	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW004	0020_SW004_220404	04 Apr 2022	ES2212597	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW004	0020_SW004_220101	07 Jul 2022	ES2224472	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW004	0020_SW004_221011	11 Oct 2022	ES2237104	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW004	0020_SW004_230130	30 Jan 2023	ES2303447	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW004	0020_SW004_230417	17 Apr 2023	ES2313254	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW004	0020_SW004_231016	16 Oct 2023	ES2336397	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW004	0020_SW004_240408	08 Apr 2024	ES2411964	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW004	0020_SW004_241025	25 Oct 2024	ES2435539	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW004	0020_SW004_250331	31 Mar 2025	ES2510618	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW004	0020_SW004_251020	20 Oct 2025	ES2533546	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW005	CL_SW02	18 Apr 2017	ES1709535	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Captains Lagoon	Receptor	0020_SW005	CL_SW02_180501	01 May 2018	ES1812871	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	0.001	<0.001	<0.001
Captains Lagoon	Receptor	0020_SW005	0020_SW005_211018	18 Oct 2021	ES2138638	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW005	0020_SW005_220404	04 Apr 2022	ES2212597	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW005	0020_SW005_221011	11 Oct 2022	ES2237104	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW005	0020_SW005_230417	17 Apr 2023	ES2313254	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW005	0020_SW005_231016	16 Oct 2023	ES2336397	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW005	0020_SW005_240408	08 Apr 2024	ES2411964	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW005	0020_SW005_241025	25 Oct 2024	ES2435539	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW005	0020_SW005_250331	31 Mar 2025	ES2510618	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW005	0020_SW005_251020	20 Oct 2025	ES2533546	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW010	CL_SW07	18 Apr 2017	ES1709535	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Captains Lagoon	Receptor	0020_SW010	CL_QC221_180501	01 May 2018	597346	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Captains Lagoon	Receptor	0020_SW010	CL_SW07_180501	01 May 2018	ES1812871	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	0.002	<0.001	<0.001
Captains Lagoon	Receptor	0020_SW010	0020_SW010_211018	18 Oct 2021	ES2138638	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW010	0020_SW010_220404	04 Apr 2022	ES2212597	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW010	0020_SW010_220101	07 Jul 2022	ES2224472	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW010	0020_SW010_221012	10 Oct 2022	ES2236866	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW010	0020_SW010_221012	12 Oct 2022	ES2237104	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW010	0020_QC120_230130	30 Jan 2023	ES2303447	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW010	0020_SW010_230130	30 Jan 2023	ES2303447	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW010	0020_SW010_230417	17 Apr 2023	ES2313254	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05



Appendix B
Table B5b
Historical Water Analytical Results - Captains Lagoon

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Ethyl perfluorooctane sulfonamidooacetic acid (EtFOSAA)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidooacetic 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
EQL	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%											
PFAS NEMP 3.0 2025 Recreational water quality											

Catchment	SPR	Location	Field ID	Date	Lab Report No.											
Captains Lagoon	Receptor	0020_SW010	0020_SW010_231016	16 Oct 2023	ES2336397	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW010	0020_SW010_240408	08 Apr 2024	ES2411964	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW010	0020_QC110_241025	25 Oct 2024	ES2435539	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW010	0020_QC210_241025	25 Oct 2024	1156671	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Captains Lagoon	Receptor	0020_SW010	0020_SW010_241025	25 Oct 2024	ES2435539	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW010	0020_SW010_250331	31 Mar 2025	ES2510618	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW010	0020_SW010_251020	20 Oct 2025	ES2533546	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW012	CL_QC206_180326	26 Mar 2018	592055	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.001	<0.001
Captains Lagoon	Receptor	0020_SW012	CL_SW12_180326	26 Mar 2018	ES1809241	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Captains Lagoon	Receptor	0020_SW012	CL_SW12_180515	15 May 2018	ES1814324	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Captains Lagoon	Receptor	0020_SW012	0020_SW012_211018	18 Oct 2021	ES2138638	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW012	0020_SW012_220404	04 Apr 2022	ES2212597	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW012	0020_SW012_221011	11 Oct 2022	ES2237104	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW012	0020_SW012_230417	17 Apr 2023	ES2313254	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW012	0020_SW012_231016	16 Oct 2023	ES2336397	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW012	0020_QC104_240408	08 Apr 2024	ES2411964	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW012	0020_QC204_240408	08 Apr 2024	348827	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Captains Lagoon	Receptor	0020_SW012	0020_SW012_240408	08 Apr 2024	ES2411964	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW012	0020_SW012_241025	25 Oct 2024	ES2435539	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW012	0020_SW012_250331	31 Mar 2025	ES2510618	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Captains Lagoon	Receptor	0020_SW012	0020_SW012_251020	20 Oct 2025	ES2533546	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05

Statistics												
Number of Results	378	378	378	378	378	378	378	378	378	378	378	378
Number of Detects	0	0	0	0	0	0	0	5	0	14	1	0
Minimum Concentration	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	0.001	0.001	0.001	<0.001
Minimum Detect	ND	ND	ND	ND	ND	ND	0.0038	ND	0.001	0.001	0.001	ND
Maximum Concentration	<0.1	<0.05	<0.5	<0.05	<0.05	<0.05	<0.1	<0.05	0.23	<0.05	<0.05	<0.05
Maximum Detect	ND	ND	ND	ND	ND	ND	0.02	ND	0.23	0.001	0.001	ND
Average Concentration *	0.024	0.01	0.03	0.023	0.01	0.023	0.011	0.021	0.024	0.021	0.021	0.021
Geometric Average *	0.018	0.0076	0.019	0.018	0.0076	0.018	0.0083	0.015	0.018	0.015	0.015	0.015
Median Concentration *	0.025	0.01	0.025	0.025	0.01	0.025	0.01	0.025	0.025	0.025	0.025	0.025
Standard Deviation *	0.0085	0.0047	0.041	0.0071	0.0047	0.0071	0.0084	0.0087	0.02	0.0085	0.0085	0.0085
Geometric Standard Deviation *	3.1	2.9	3.3	3	2.9	3	3	3.2	3	3.2	3.2	3.2
95% UCL (Student's-t) *	0.0243	0.0104	0.0333	0.0233	0.0104	0.0233	0.0121	0.0216	0.026	0.0218	0.0218	0.0218
Number of Env Standard Exceedances	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
% of Detects	0	0	0	0	0	0	1	0	4	0	0	0
% of Non-Detects	100	100	100	100	100	100	99	100	96	100	100	100
% of Detects at or above Env Standards	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

* 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 Reported Analyte LOR is higher than Requested Analyte LOR



Appendix B
Table B5c
Historical Water Analytical Results - Clay Pools

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids			
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Sum of US EPA PFAS (PFOS + PFOA)*	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)
	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	0.0001	0.0005	0.0005	0.0003	0.0003	0.0003	0.001	0.001	0.0005	0.0005	0.01	0.0005
0020_0021_Human health consumption of biota					0.01							
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13		220									
PFAS NEMP 3.0 2025 Recreational water quality	2	2	10		2							

Catchment	SPR	Location	Field ID	Date	Lab Report No.												
Clay Pools	Receptor	0021_MW020	MW020	01 May 2017	ES1710866	0.0028	0.0009	<0.0005	0.0037	0.0037	0.0037	-	-	<0.0005	<0.0005	-	<0.0005
Clay Pools	Receptor	0021_MW020	0021_MW020_190214	14 Feb 2019	ES1905115	0.0108	0.0015	<0.0005	0.0203	0.0123	0.0203	-	-	<0.0005	<0.0005	-	<0.0005
Clay Pools	Receptor	0021_MW020	0021_QC210_190214	14 Feb 2019	641508	0.0083	0.001	<0.001	0.0183	0.0093	0.0183	-	-	<0.001	<0.001	-	<0.001
Clay Pools	Receptor	0021_MW020	0021_MW020_190529	29 May 2019	ES1916831	0.0099	0.0050	<0.0005	0.0156	0.0149	0.0149	-	-	<0.0005	<0.0005	-	<0.0005
Clay Pools	Receptor	0021_MW020	0021_QC200_190529	29 May 2019	660059	0.0048	0.004	<0.001	<0.1	<0.01	<0.05	<0.01	<0.01	<0.001	<0.001	-	<0.001
Clay Pools	Receptor	0021_MW020	0021_MW020_241023	23 Oct 2024	ES2435078	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02
Clay Pools	Receptor	0021_MW020	0021_MW020_250402	02 Apr 2025	ES2510113	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02
Clay Pools	Receptor	0021_MW020	0021_MW020_251021	21 Oct 2025	ES2533521	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02
Clay Pools	Receptor	0021_SW076	UN2_QC102_180322	22 Mar 2018	ES1808818	0.0016	0.0006	<0.0005	0.0022	0.0022	0.0022	-	-	<0.0005	<0.0005	-	<0.0005
Clay Pools	Receptor	0021_SW076	UN2_SW01_180322	22 Mar 2018	ES1808818	0.0017	0.0008	<0.0005	0.0025	0.0025	0.0025	-	-	<0.0005	<0.0005	-	<0.0005
Clay Pools	Receptor	0021_SW076	UN2_QC202_190211	11 Feb 2019	640876	0.0028 ^{#1}	<0.001	<0.001	<0.005	0.0028	<0.005	-	-	<0.001	<0.001	-	<0.001
Clay Pools	Receptor	0021_SW076	UN2_SW01_190211	11 Feb 2019	ES1904669	0.0022	0.0008	<0.0005	0.0035	0.003	0.0035	-	-	<0.0005	<0.0005	-	<0.0005
Clay Pools	Receptor	0021_SW076	UN2_SW01_190318	18 Mar 2019	ES1908940	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}	-	-	<0.0020 ^{#2}	<0.0020 ^{#2}	-	<0.0020 ^{#2}
Clay Pools	Receptor	0021_SW076	0021_SW076_221012	12 Oct 2022	ES2237106	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02
Clay Pools	Receptor	0021_SW076	0021_SW076_230419	19 Apr 2023	ES2313364	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02
Clay Pools	Receptor	0021_SW076	0021_SW076_231018	18 Oct 2023	ES2336399	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02
Clay Pools	Receptor	0021_SW076	0021_QC105_240410	10 Apr 2024	ES2412012	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02
Clay Pools	Receptor	0021_SW076	0021_QC205_240410	10 Apr 2024	348825	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.01	<0.02	-	<0.01
Clay Pools	Receptor	0021_SW076	0021_SW076_240410	10 Apr 2024	ES2412012	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02
Clay Pools	Receptor	0021_SW076	0021_QC254_241023	23 Oct 2024	1154751	<0.01	<0.01	<0.01	<0.1	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Clay Pools	Receptor	0021_SW076	0021_SW076_241023	23 Oct 2024	ES2435078	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02
Clay Pools	Receptor	0021_SW076	0021_SW076_250402	02 Apr 2025	ES2510623	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02
Clay Pools	Receptor	0021_SW076	0021_SW076_251023	23 Oct 2025	ES2533538	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02
Clay Pools	Receptor	0021_SW077	UN2_QC202_180322	22 Mar 2018	591340	0.0033	0.004	<0.001	0.0073	0.0073	0.0073	-	-	<0.001	<0.001	-	<0.001
Clay Pools	Receptor	0021_SW077	UN2_SW02_180322	22 Mar 2018	ES1808818	0.0018	0.0029	<0.0005	0.0047	0.0047	0.0047	-	-	<0.0005	<0.0005	-	<0.0005
Clay Pools	Receptor	0021_SW077	UN2_SW02_190211	11 Feb 2019	ES1904669	0.003	0.0052	<0.0005	0.0082	0.0082	0.0082	-	-	<0.0005	<0.0005	-	<0.0005
Clay Pools	Receptor	0021_SW077	UN2_QC105_190318	18 Mar 2019	ES1908940	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}	-	-	<0.0020 ^{#2}	<0.0020 ^{#2}	-	<0.0020 ^{#2}
Clay Pools	Receptor	0021_SW077	UN2_SW02_190318	18 Mar 2019	ES1908940	0.0034	0.0030	<0.0020 ^{#2}	0.0064	0.0064	0.0064	-	-	<0.0020 ^{#2}	<0.0020 ^{#2}	-	<0.0020 ^{#2}
Clay Pools	Receptor	0021_SW077	0021_SW077_221012	12 Oct 2022	ES2237106	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02
Clay Pools	Receptor	0021_SW077	0021_QC105_230419	19 Apr 2023	ES2313364	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02
Clay Pools	Receptor	0021_SW077	0021_QC205_230419	19 Apr 2023	321517	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.01	<0.02	-	<0.01
Clay Pools	Receptor	0021_SW077	0021_SW077_230419	19 Apr 2023	ES2313364	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02
Clay Pools	Receptor	0021_SW077	0021_SW077_231018	18 Oct 2023	ES2336399	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02
Clay Pools	Receptor	0021_SW077	0021_SW077_240410	10 Apr 2024	ES2412012	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02
Clay Pools	Receptor	0021_SW077	0021_SW077_251023	23 Oct 2025	ES2533538	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02
Clay Pools	Receptor	0021_SW078	UN2_SW03_180322	22 Mar 2018	ES1808818	0.0054	0.0087	<0.0005	0.0175	0.0141	0.0175	-	-	<0.0005	<0.0005	-	<0.0005
Clay Pools	Receptor	0021_SW078	UN2_QC102_190211	11 Feb 2019	ES1904669	0.0091	0.0118	<0.0005	0.0219	0.0209	0.0219	-	-	<0.0005	<0.0005	-	<0.0005
Clay Pools	Receptor	0021_SW078	UN2_SW03_190211	11 Feb 2019	ES1904669	0.0083	0.0115	<0.0005	0.0208	0.0198	0.0208	-	-	<0.0005	<0.0005	-	<0.0005
Clay Pools	Receptor	0021_SW078	UN2_SW03_190318	18 Mar 2019	ES1908940	0.0070	0.0072	<0.0020 ^{#2}	0.0142	0.0142	0.0142	-	-	<0.0020 ^{#2}	<0.0020 ^{#2}	-	<0.0020 ^{#2}
Clay Pools	Receptor	0021_SW078	0021_SW078_221012	12 Oct 2022	ES2237106	0.01	0.02	<0.01	0.03	0.03	0.03	-	-	<0.02	<0.02	-	<0.02
Clay Pools	Receptor	0021_SW078	0021_SW078_230419	19 Apr 2023	ES2313364	0.03	0.05	<0.01	0.08	0.08	0.08	-	-	<0.02	<0.02	-	<0.02
Clay Pools	Receptor	0021_SW078	0021_SW078_231017	17 Oct 2023	ES2336399	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02
Clay Pools	Receptor	0021_SW078	0021_SW078_240410	10 Apr 2024	ES2412012	0.02	0.02	<0.01	0.04	0.04	0.04	-	-	<0.02	<0.02	-	<0.02
Clay Pools	Receptor	0021_SW078	0021_SW078_241023	23 Oct 2024	ES2435078	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02



Appendix B
Table B5c
Historical Water Analytical Results - Clay Pools

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids			
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Sum of US EPA PFAS (PFOS + PFOA)*	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)
	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	0.0001	0.0005	0.0005	0.0003	0.0003	0.0003	0.001	0.001	0.0005	0.0005	0.01	0.0005
0020_0021_Human health consumption of biota					0.01							
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13		220									
PFAS NEMP 3.0 2025 Recreational water quality	2	2	10		2							

Catchment	SPR	Location	Field ID	Date	Lab Report No.												
Clay Pools	Receptor	0021_SW078	0021_SW078_250402	02 Apr 2025	ES2510623	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02
Clay Pools	Receptor	0021_SW078	0021_SW078_251023	23 Oct 2025	ES2533538	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02
Clay Pools	Receptor	0021_SW079	UN2_SW04_180322	22 Mar 2018	ES1808818	0.0041	0.0049	0.0006	0.0102	0.0090	0.0102	-	-	<0.0005	<0.0005	-	<0.0005
Clay Pools	Receptor	0021_SW079	UN2_SW04_190211	11 Feb 2019	ES1904669	0.057	0.0402	0.001	0.107	0.0972	0.105	-	-	<0.0005	<0.0005	-	<0.0005
Clay Pools	Receptor	0021_SW079	UN2_SW04_190318	18 Mar 2019	ES1908940	0.0226	0.0132	<0.0020 ^{#2}	0.0358	0.0358	0.0358	-	-	<0.0020 ^{#2}	<0.0020 ^{#2}	-	<0.0020 ^{#2}
Clay Pools	Receptor	0021_SW079	0021_QC202_221012	12 Oct 2022	308187	0.05	0.04	<0.01	0.08	0.08	-	0.05	-	<0.01	<0.02	-	<0.01
Clay Pools	Receptor	0021_SW079	0021_SW079_221012	12 Oct 2022	ES2237106	0.05	0.05	<0.01	0.10	0.10	0.10	-	-	<0.02	<0.02	-	<0.02
Clay Pools	Receptor	0021_SW079	0021_QC103_230419	19 Apr 2023	ES2313364	0.06	0.08	<0.01	0.14	0.14	0.14	-	-	<0.02	<0.02	-	<0.02
Clay Pools	Receptor	0021_SW079	0021_QC203_230419	19 Apr 2023	321517	0.08	0.1	<0.01	0.18	0.18	-	0.08	-	<0.01	<0.02	-	<0.01
Clay Pools	Receptor	0021_SW079	0021_SW079_230419	19 Apr 2023	ES2313364	0.06	0.06	<0.01	0.12	0.12	0.12	-	-	<0.02	<0.02	-	<0.02
Clay Pools	Receptor	0021_SW079	0021_SW079_231017	17 Oct 2023	ES2336399	0.07	0.04	<0.01	0.11	0.11	0.11	-	-	<0.02	<0.02	-	<0.02
Clay Pools	Receptor	0021_SW079	0021_SW079_240410	10 Apr 2024	ES2412012	0.05	0.06	<0.01	0.11	0.11	0.11	-	-	<0.02	<0.02	-	<0.02
Clay Pools	Receptor	0021_SW079	0021_SW079_241023	23 Oct 2024	ES2435078	0.05	0.03	<0.01	0.08	0.08	0.08	-	-	<0.02	<0.02	-	<0.02
Clay Pools	Receptor	0021_SW079	0021_SW079_250402	02 Apr 2025	ES2510623	0.04	0.02	<0.01	0.06	0.06	0.06	-	-	<0.02	<0.02	-	<0.02
Clay Pools	Receptor	0021_SW079	0021_SW079_251023	23 Oct 2025	ES2533538	0.06	0.03	<0.01	0.09	0.09	0.09	-	-	<0.02	<0.02	-	<0.02
Clay Pools	Receptor	0021_SW080	UN2_SW05_180322	22 Mar 2018	ES1808818	0.0546	0.0466	0.0010	0.110	0.101	0.109	-	-	0.0015	<0.0005	-	<0.0005
Clay Pools	Receptor	0021_SW080	UN2_SW05_190211	11 Feb 2019	ES1904669	0.0247	0.0223	0.0006	0.0512	0.047	0.0512	-	-	<0.0005	<0.0005	-	<0.0005
Clay Pools	Receptor	0021_SW080	UN2_SW05_190318	18 Mar 2019	ES1908940	0.0038	0.0030	<0.0005	0.0068	0.0068	0.0068	-	-	<0.0005	<0.0005	-	<0.0005
Clay Pools	Receptor	0021_SW080	0021_SW080_221012	12 Oct 2022	ES2237106	0.03	0.02	<0.01	0.05	0.05	0.05	-	-	<0.02	<0.02	-	<0.02
Clay Pools	Receptor	0021_SW080	0021_SW080_230419	19 Apr 2023	ES2313364	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02
Clay Pools	Receptor	0021_SW080	0021_QC108_231017	17 Oct 2023	ES2336399	0.03	0.01	<0.01	0.04	0.04	0.04	-	-	<0.02	<0.02	-	<0.02
Clay Pools	Receptor	0021_SW080	0021_QC208_231017	17 Oct 2023	335876	0.02	0.02	<0.01	0.05	0.05	-	0.02	-	<0.01	<0.02	-	<0.01
Clay Pools	Receptor	0021_SW080	0021_SW080_231017	17 Oct 2023	ES2336399	0.04	0.01	<0.01	0.05	0.05	0.05	-	-	<0.02	<0.02	-	<0.02
Clay Pools	Receptor	0021_SW080	0021_QC109_240410	10 Apr 2024	ES2412012	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02
Clay Pools	Receptor	0021_SW080	0021_QC209_240410	10 Apr 2024	348825	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.01	<0.02	-	<0.01
Clay Pools	Receptor	0021_SW080	0021_SW080_240410	10 Apr 2024	ES2412012	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02
Clay Pools	Receptor	0021_SW080	0021_SW080_241023	23 Oct 2024	ES2435078	0.02	0.01	<0.01	0.03	0.03	0.03	-	-	<0.02	<0.02	-	<0.02
Clay Pools	Receptor	0021_SW080	0021_SW080_250402	02 Apr 2025	ES2510623	0.02	0.01	<0.01	0.03	0.03	0.03	-	-	<0.02	<0.02	-	<0.02
Clay Pools	Receptor	0021_SW080	0021_SW080_251023	23 Oct 2025	ES2533538	0.03	0.01	<0.01	0.04	0.04	0.04	-	-	<0.02	<0.02	-	<0.02

Statistics													
Number of Results	73	73	73	73	73	67	8	2	73	73	1	73	
Number of Detects	43	42	4	41	42	38	3	0	1	0	0	0	
Minimum Concentration	0.0016	0.0006	<0.0005	<0.002	<0.002	<0.002	<0.01	<0.01	<0.0005	<0.0005	<0.01	<0.0005	
Minimum Detect	0.0016	0.0006	0.0006	0.0022	0.0022	0.0022	0.02	ND	0.0015	ND	ND	ND	
Maximum Concentration	0.08	0.1	<0.01	0.18	0.18	0.14	0.08	<0.01	<0.02	<0.02	<0.01	<0.02	
Maximum Detect	0.08	0.1	0.001	0.18	0.18	0.14	0.08	ND	0.0015	ND	ND	ND	
Average Concentration *	0.017	0.014	0.0035	0.031	0.029	0.028	0.022	0.005	0.0063	0.0067		0.0062	
Geometric Average *	0.0087	0.007	0.0022	0.013	0.012	0.013	0.011	0.005	0.0031	0.0032	0.005	0.003	
Median Concentration *	0.005	0.005	0.005	0.0068	0.005	0.0068	0.005	0.005	0.01	0.01	0.005	0.01	
Standard Deviation *	0.02	0.019	0.0021	0.04	0.039	0.036	0.028	0	0.0044	0.0046		0.0045	
Geometric Standard Deviation *	3.1	3.3	3.4	3.8	3.7	3.6	3.2	1	4.7	5		4.8	
95% UCL (Student's-t) *	0.0206	0.0179	0.00389	0.0384	0.0365	0.0351	0.0408	0.005	0.00713	0.00755		0.00712	
Number of Env Standard Exceedances	25	26	0	0	30	0	0	0	0	0	0	0	



	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids			
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Sum of US EPA PFAS (PFOS + PFOA)*	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)
EQL	0.0001	0.0005	0.0005	0.0003	0.0003	0.0003	0.001	0.001	0.0005	0.0005	0.01	0.0005
0020_0021_Human health consumption of biota					0.01							
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13		220									
PFAS NEMP 3.0 2025 Recreational water quality	2	2	10		2							

Number of Env Standard Exceedances (Detects Only)	25	26	0	0	30	0	0	0	0	0	0	0
% of Detects	59	58	5	56	58	57	38	0	1	0	0	0
% of Non-Detects	41	42	95	44	42	43	62	100	99	100	100	100
% of Detects at or above Env Standards	34	36	0	0	41	0	0	0	0	0	0	0
% of Results Below Env Standards or Non-Detect	66	64	100	100	59	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.

#2 Reported Analyte LOR is higher than Requested Analyte LOR



Appendix B
Table B5c
Historical Water Analytical Results - Clay Pools

						PFAS - Perfluoroalkyl Carboxylic Acids											
						Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentanesulfonic acid (PFPeS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnDA)
						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	0.0005	0.002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
0020_0021_Human health consumption of biota																	
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%																	
PFAS NEMP 3.0 2025 Recreational water quality																	
Catchment	SPR	Location	Field ID	Date	Lab Report No.												
Clay Pools	Receptor	0021_MW020	MW020	01 May 2017	ES1710866	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_MW020	0021_MW020_190214	14 Feb 2019	ES1905115	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_MW020	0021_QC210_190214	14 Feb 2019	641508	-	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Clay Pools	Receptor	0021_MW020	0021_MW020_190529	29 May 2019	ES1916831	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0007
Clay Pools	Receptor	0021_MW020	0021_QC200_190529	29 May 2019	660059	-	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Clay Pools	Receptor	0021_MW020	0021_MW020_241023	23 Oct 2024	ES2435078	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Clay Pools	Receptor	0021_MW020	0021_MW020_250402	02 Apr 2025	ES2510113	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Clay Pools	Receptor	0021_MW020	0021_MW020_251021	21 Oct 2025	ES2533521	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Clay Pools	Receptor	0021_SW076	UN2_QC102_180322	22 Mar 2018	ES1808818	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SW076	UN2_SW01_180322	22 Mar 2018	ES1808818	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SW076	UN2_QC202_190211	11 Feb 2019	640876	-	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Clay Pools	Receptor	0021_SW076	UN2_SW01_190211	11 Feb 2019	ES1904669	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SW076	UN2_SW01_190318	18 Mar 2019	ES1908940	-	<0.0020 ^{#2}	<0.002	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.0050 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}
Clay Pools	Receptor	0021_SW076	0021_SW076_221012	12 Oct 2022	ES2237106	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Clay Pools	Receptor	0021_SW076	0021_SW076_230419	19 Apr 2023	ES2313364	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Clay Pools	Receptor	0021_SW076	0021_SW076_231018	18 Oct 2023	ES2336399	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Clay Pools	Receptor	0021_SW076	0021_QC105_240410	10 Apr 2024	ES2412012	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Clay Pools	Receptor	0021_SW076	0021_QC205_240410	10 Apr 2024	348825	-	<0.01	<0.02	<0.02	<0.05	<0.01	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02
Clay Pools	Receptor	0021_SW076	0021_SW076_240410	10 Apr 2024	ES2412012	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Clay Pools	Receptor	0021_SW076	0021_QC254_241023	23 Oct 2024	1154751	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Clay Pools	Receptor	0021_SW076	0021_SW076_241023	23 Oct 2024	ES2435078	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Clay Pools	Receptor	0021_SW076	0021_SW076_250402	02 Apr 2025	ES2510623	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Clay Pools	Receptor	0021_SW076	0021_SW076_251023	23 Oct 2025	ES2533538	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Clay Pools	Receptor	0021_SW077	UN2_QC202_180322	22 Mar 2018	591340	-	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Clay Pools	Receptor	0021_SW077	UN2_SW02_180322	22 Mar 2018	ES1808818	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SW077	UN2_SW02_190211	11 Feb 2019	ES1904669	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SW077	UN2_QC105_190318	18 Mar 2019	ES1908940	-	<0.0020 ^{#2}	<0.002	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.0050 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}
Clay Pools	Receptor	0021_SW077	UN2_SW02_190318	18 Mar 2019	ES1908940	-	<0.0020 ^{#2}	<0.002	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.0050 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}
Clay Pools	Receptor	0021_SW077	0021_SW077_221012	12 Oct 2022	ES2237106	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Clay Pools	Receptor	0021_SW077	0021_QC105_230419	19 Apr 2023	ES2313364	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Clay Pools	Receptor	0021_SW077	0021_QC205_230419	19 Apr 2023	321517	-	<0.01	<0.02	<0.02	<0.05	<0.01	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02
Clay Pools	Receptor	0021_SW077	0021_SW077_230419	19 Apr 2023	ES2313364	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Clay Pools	Receptor	0021_SW077	0021_SW077_231018	18 Oct 2023	ES2336399	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Clay Pools	Receptor	0021_SW077	0021_SW077_240410	10 Apr 2024	ES2412012	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Clay Pools	Receptor	0021_SW077	0021_SW077_251023	23 Oct 2025	ES2533538	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Clay Pools	Receptor	0021_SW078	UN2_SW03_180322	22 Mar 2018	ES1808818	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0034	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SW078	UN2_QC102_190211	11 Feb 2019	ES1904669	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SW078	UN2_SW03_190211	11 Feb 2019	ES1904669	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SW078	UN2_SW03_190318	18 Mar 2019	ES1908940	-	<0.0020 ^{#2}	<0.002	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}				



Appendix B
Table B5c
Historical Water Analytical Results - Clay Pools

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Carboxylic Acids											
	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnDA)
	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	0.0005	0.002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
0020_0021_Human health consumption of biota												
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%												
PFAS NEMP 3.0 2025 Recreational water quality												

Catchment	SPR	Location	Field ID	Date	Lab Report No.												
Clay Pools	Receptor	0021_SW078	0021_SW078_250402	02 Apr 2025	ES2510623	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Clay Pools	Receptor	0021_SW078	0021_SW078_251023	23 Oct 2025	ES2533538	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Clay Pools	Receptor	0021_SW079	UN2_SW04_180322	22 Mar 2018	ES1808818	-	<0.0005	<0.002	<0.0005	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SW079	UN2_SW04_190211	11 Feb 2019	ES1904669	-	0.0012	<0.002	<0.0005	<0.0005	0.0009	0.0063	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SW079	UN2_SW04_190318	18 Mar 2019	ES1908940	-	<0.0020 ^{#2}	<0.002	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.0050 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}
Clay Pools	Receptor	0021_SW079	0021_QC202_221012	12 Oct 2022	308187	-	<0.01	<0.02	<0.02	<0.05	<0.01	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02
Clay Pools	Receptor	0021_SW079	0021_SW079_221012	12 Oct 2022	ES2237106	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Clay Pools	Receptor	0021_SW079	0021_QC103_230419	19 Apr 2023	ES2313364	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Clay Pools	Receptor	0021_SW079	0021_QC203_230419	19 Apr 2023	321517	-	<0.01	<0.02	<0.02	<0.05	<0.01	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02
Clay Pools	Receptor	0021_SW079	0021_SW079_230419	19 Apr 2023	ES2313364	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Clay Pools	Receptor	0021_SW079	0021_SW079_231017	17 Oct 2023	ES2336399	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Clay Pools	Receptor	0021_SW079	0021_SW079_240410	10 Apr 2024	ES2412012	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Clay Pools	Receptor	0021_SW079	0021_SW079_241023	23 Oct 2024	ES2435078	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Clay Pools	Receptor	0021_SW079	0021_SW079_250402	02 Apr 2025	ES2510623	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Clay Pools	Receptor	0021_SW079	0021_SW079_251023	23 Oct 2025	ES2533538	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Clay Pools	Receptor	0021_SW080	UN2_SW05_180322	22 Mar 2018	ES1808818	-	0.0015	<0.002	<0.0005	<0.0005	0.0008	0.0043	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SW080	UN2_SW05_190211	11 Feb 2019	ES1904669	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	0.0036	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SW080	UN2_SW05_190318	18 Mar 2019	ES1908940	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SW080	0021_SW080_221012	12 Oct 2022	ES2237106	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Clay Pools	Receptor	0021_SW080	0021_SW080_230419	19 Apr 2023	ES2313364	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Clay Pools	Receptor	0021_SW080	0021_QC108_231017	17 Oct 2023	ES2336399	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Clay Pools	Receptor	0021_SW080	0021_QC208_231017	17 Oct 2023	335876	-	<0.01	<0.02	<0.02	<0.05	<0.01	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02
Clay Pools	Receptor	0021_SW080	0021_SW080_231017	17 Oct 2023	ES2336399	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Clay Pools	Receptor	0021_SW080	0021_QC109_240410	10 Apr 2024	ES2412012	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Clay Pools	Receptor	0021_SW080	0021_QC209_240410	10 Apr 2024	348825	-	<0.01	<0.02	<0.02	<0.05	<0.01	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02
Clay Pools	Receptor	0021_SW080	0021_SW080_240410	10 Apr 2024	ES2412012	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Clay Pools	Receptor	0021_SW080	0021_SW080_241023	23 Oct 2024	ES2435078	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Clay Pools	Receptor	0021_SW080	0021_SW080_250402	02 Apr 2025	ES2510623	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Clay Pools	Receptor	0021_SW080	0021_SW080_251023	23 Oct 2025	ES2533538	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02

Statistics													
Number of Results	1	73	73	73	73	73	73	73	73	73	73	73	73
Number of Detects	0	2	0	0	0	3	6	0	1	0	0	0	1
Minimum Concentration	<0.01	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Minimum Detect	ND	0.0012	ND	ND	ND	0.0006	0.0005	ND	0.0034	ND	ND	ND	0.0007
Maximum Concentration	<0.01	<0.02	<0.1	<0.02	<0.05	<0.02	<0.02	<0.02	<0.02	<0.5	<0.1	<0.02	<0.02
Maximum Detect	ND	0.0015	ND	ND	ND	0.0009	0.0063	ND	0.0034	ND	ND	0.0007	0.0007
Average Concentration *		0.0063	0.03	0.0067	0.0079	0.0063	0.0065	0.0062	0.0067	0.035	0.0099	0.0067	
Geometric Average *	0.005	0.0032	0.012	0.0032	0.0034	0.0032	0.0036	0.003	0.0033	0.0074	0.0037	0.0032	
Median Concentration *	0.005	0.01	0.05	0.01	0.01	0.01	0.01	0.01	0.01	0.025	0.01	0.01	
Standard Deviation *		0.0044	0.023	0.0046	0.0068	0.0044	0.0043	0.0045	0.0045	0.066	0.013	0.0046	
Geometric Standard Deviation *		4.6	5.8	5	5.4	4.6	4.2	4.8	4.8	9.2	5.8	4.9	
95% UCL (Student's-t) *		0.00714	0.0342	0.00755	0.00922	0.00713	0.00729	0.00712	0.00758	0.0477	0.0125	0.00755	
Number of Env Standard Exceedances	0	0	0	0	0	0	0	0	0	0	0	0	



	PFAS - Perfluoroalkyl Carboxylic Acids											
	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnDA)
EQL	0.01	0.0005	0.002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
0020_0021_Human health consumption of biota												
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%												
PFAS NEMP 3.0 2025 Recreational water quality												

Number of Env Standard Exceedances (Detects Only)	0	0	0	0	0	0	0	0	0	0	0	0
% of Detects	0	3	0	0	0	4	8	0	1	0	0	1
% of Non-Detects	100	97	100	100	100	96	92	100	99	100	100	99
% of Detects at or above Env Standards	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

* 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 Reported Analyte LOR is higher than Requested Analyte LOR



Appendix B
Table B5c
Historical Water Analytical Results - Clay Pools

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
	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
EQL	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
0020_0021_Human health consumption of biota											
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%											
PFAS NEMP 3.0 2025 Recreational water quality											

Catchment	SPR	Location	Field ID	Date	Lab Report No.											
Clay Pools	Receptor	0021_MW020	MW020	01 May 2017	ES1710866	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Clay Pools	Receptor	0021_MW020	0021_MW020_190214	14 Feb 2019	ES1905115	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	0.008	<0.001	<0.001
Clay Pools	Receptor	0021_MW020	0021_QC210_190214	14 Feb 2019	641508	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	0.009	<0.001	<0.001
Clay Pools	Receptor	0021_MW020	0021_MW020_190529	29 May 2019	ES1916831	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Clay Pools	Receptor	0021_MW020	0021_QC200_190529	29 May 2019	660059	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.001	<0.001
Clay Pools	Receptor	0021_MW020	0021_MW020_241023	23 Oct 2024	ES2435078	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Clay Pools	Receptor	0021_MW020	0021_MW020_250402	02 Apr 2025	ES2510113	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Clay Pools	Receptor	0021_MW020	0021_MW020_251021	21 Oct 2025	ES2533521	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Clay Pools	Receptor	0021_SW076	UN2_QC102_180322	22 Mar 2018	ES1808818	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Clay Pools	Receptor	0021_SW076	UN2_SW01_180322	22 Mar 2018	ES1808818	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Clay Pools	Receptor	0021_SW076	UN2_QC202_190211	11 Feb 2019	640876	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.001	<0.001
Clay Pools	Receptor	0021_SW076	UN2_SW01_190211	11 Feb 2019	ES1904669	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Clay Pools	Receptor	0021_SW076	UN2_SW01_190318	18 Mar 2019	ES1908940	<0.005 ^{#2}	<0.0020 ^{#2}	<0.005 ^{#2}	<0.005 ^{#2}	<0.0020 ^{#2}	<0.005 ^{#2}	<0.0020 ^{#2}	<0.002 ^{#2}	<0.002 ^{#2}	<0.002 ^{#2}	<0.002 ^{#2}
Clay Pools	Receptor	0021_SW076	0021_SW076_221012	12 Oct 2022	ES2237106	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Clay Pools	Receptor	0021_SW076	0021_SW076_230419	19 Apr 2023	ES2313364	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Clay Pools	Receptor	0021_SW076	0021_SW076_231018	18 Oct 2023	ES2336399	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Clay Pools	Receptor	0021_SW076	0021_QC105_240410	10 Apr 2024	ES2412012	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Clay Pools	Receptor	0021_SW076	0021_QC205_240410	10 Apr 2024	348825	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Clay Pools	Receptor	0021_SW076	0021_SW076_240410	10 Apr 2024	ES2412012	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Clay Pools	Receptor	0021_SW076	0021_QC254_241023	23 Oct 2024	1154751	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Clay Pools	Receptor	0021_SW076	0021_SW076_241023	23 Oct 2024	ES2435078	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Clay Pools	Receptor	0021_SW076	0021_SW076_250402	02 Apr 2025	ES2510623	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Clay Pools	Receptor	0021_SW076	0021_SW076_251023	23 Oct 2025	ES2533538	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Clay Pools	Receptor	0021_SW077	UN2_QC202_180322	22 Mar 2018	591340	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.001	<0.001
Clay Pools	Receptor	0021_SW077	UN2_SW02_180322	22 Mar 2018	ES1808818	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Clay Pools	Receptor	0021_SW077	UN2_SW02_190211	11 Feb 2019	ES1904669	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Clay Pools	Receptor	0021_SW077	UN2_QC105_190318	18 Mar 2019	ES1908940	<0.005 ^{#2}	<0.0020 ^{#2}	<0.005 ^{#2}	<0.005 ^{#2}	<0.0020 ^{#2}	<0.005 ^{#2}	<0.0020 ^{#2}	<0.002 ^{#2}	<0.002 ^{#2}	<0.002 ^{#2}	<0.002 ^{#2}
Clay Pools	Receptor	0021_SW077	UN2_SW02_190318	18 Mar 2019	ES1908940	<0.005 ^{#2}	<0.0020 ^{#2}	<0.005 ^{#2}	<0.005 ^{#2}	<0.0020 ^{#2}	<0.005 ^{#2}	<0.0020 ^{#2}	<0.002 ^{#2}	<0.002 ^{#2}	<0.002 ^{#2}	<0.002 ^{#2}
Clay Pools	Receptor	0021_SW077	0021_SW077_221012	12 Oct 2022	ES2237106	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Clay Pools	Receptor	0021_SW077	0021_QC105_230419	19 Apr 2023	ES2313364	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Clay Pools	Receptor	0021_SW077	0021_QC205_230419	19 Apr 2023	321517	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Clay Pools	Receptor	0021_SW077	0021_SW077_230419	19 Apr 2023	ES2313364	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Clay Pools	Receptor	0021_SW077	0021_SW077_231018	18 Oct 2023	ES2336399	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Clay Pools	Receptor	0021_SW077	0021_SW077_240410	10 Apr 2024	ES2412012	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Clay Pools	Receptor	0021_SW077	0021_SW077_251023	23 Oct 2025	ES2533538	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Clay Pools	Receptor	0021_SW078	UN2_SW03_180322	22 Mar 2018	ES1808818	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Clay Pools	Receptor	0021_SW078	UN2_QC102_190211	11 Feb 2019	ES1904669	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Clay Pools	Receptor	0021_SW078	UN2_SW03_190211	11 Feb 2019	ES1904669	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Clay Pools	Receptor	0021_SW078	UN2_SW03_190318	18 Mar 2019	ES1908940	<0.005 ^{#2}	<0.0020 ^{#2}	<0.005 ^{#2}	<0.005 ^{#2}	<0.0020 ^{#2}	<0.005 ^{#2}	<0.0020 ^{#2}	<0.002 ^{#2}	<0.002 ^{#2}	<0.002 ^{#2}	<0.002 ^{#2}
Clay Pools	Receptor	0021_SW078	0021_SW078_221012	12 Oct 2022	ES2237106	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Clay Pools	Receptor	0021_SW078	0021_SW078_230419	19 Apr 2023	ES2313364	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Clay Pools	Receptor	0021_SW078	0021_SW078_231017	17 Oct 2023	ES2336399	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Clay Pools	Receptor	0021_SW078	0021_SW078_240410	10 Apr 2024	ES2412012	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Clay Pools	Receptor	0021_SW078	0021_SW078_241023	23 Oct 2024	ES2435078	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05



Appendix B
Table B5c
Historical Water Analytical Results - Clay Pools

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
	N-Ethyl perfluorooctane sulfonamide (EtFOA)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOA)	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
EQL	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
0020_0021_Human health consumption of biota											
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%											
PFAS NEMP 3.0 2025 Recreational water quality											

Catchment	SPR	Location	Field ID	Date	Lab Report No.											
Clay Pools	Receptor	0021_SW078	0021_SW078_250402	02 Apr 2025	ES2510623	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Clay Pools	Receptor	0021_SW078	0021_SW078_251023	23 Oct 2025	ES2533538	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Clay Pools	Receptor	0021_SW079	UN2_SW04_180322	22 Mar 2018	ES1808818	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Clay Pools	Receptor	0021_SW079	UN2_SW04_190211	11 Feb 2019	ES1904669	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Clay Pools	Receptor	0021_SW079	UN2_SW04_190318	18 Mar 2019	ES1908940	<0.005 ^{#2}	<0.0020 ^{#2}	<0.005 ^{#2}	<0.005 ^{#2}	<0.0020 ^{#2}	<0.005 ^{#2}	<0.0020 ^{#2}	<0.002 ^{#2}	<0.002 ^{#2}	<0.002 ^{#2}	<0.002 ^{#2}
Clay Pools	Receptor	0021_SW079	0021_QC202_221012	12 Oct 2022	308187	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Clay Pools	Receptor	0021_SW079	0021_SW079_221012	12 Oct 2022	ES2237106	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Clay Pools	Receptor	0021_SW079	0021_QC103_230419	19 Apr 2023	ES2313364	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Clay Pools	Receptor	0021_SW079	0021_QC203_230419	19 Apr 2023	321517	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Clay Pools	Receptor	0021_SW079	0021_SW079_230419	19 Apr 2023	ES2313364	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Clay Pools	Receptor	0021_SW079	0021_SW079_231017	17 Oct 2023	ES2336399	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Clay Pools	Receptor	0021_SW079	0021_SW079_240410	10 Apr 2024	ES2412012	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Clay Pools	Receptor	0021_SW079	0021_SW079_241023	23 Oct 2024	ES2435078	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Clay Pools	Receptor	0021_SW079	0021_SW079_250402	02 Apr 2025	ES2510623	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Clay Pools	Receptor	0021_SW079	0021_SW079_251023	23 Oct 2025	ES2533538	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Clay Pools	Receptor	0021_SW080	UN2_SW05_180322	22 Mar 2018	ES1808818	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Clay Pools	Receptor	0021_SW080	UN2_SW05_190211	11 Feb 2019	ES1904669	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Clay Pools	Receptor	0021_SW080	UN2_SW05_190318	18 Mar 2019	ES1908940	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Clay Pools	Receptor	0021_SW080	0021_SW080_221012	12 Oct 2022	ES2237106	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Clay Pools	Receptor	0021_SW080	0021_SW080_230419	19 Apr 2023	ES2313364	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Clay Pools	Receptor	0021_SW080	0021_QC108_231017	17 Oct 2023	ES2336399	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Clay Pools	Receptor	0021_SW080	0021_QC208_231017	17 Oct 2023	335876	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Clay Pools	Receptor	0021_SW080	0021_SW080_231017	17 Oct 2023	ES2336399	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Clay Pools	Receptor	0021_SW080	0021_QC109_240410	10 Apr 2024	ES2412012	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Clay Pools	Receptor	0021_SW080	0021_QC209_240410	10 Apr 2024	348825	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Clay Pools	Receptor	0021_SW080	0021_SW080_240410	10 Apr 2024	ES2412012	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Clay Pools	Receptor	0021_SW080	0021_SW080_241023	23 Oct 2024	ES2435078	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Clay Pools	Receptor	0021_SW080	0021_SW080_250402	02 Apr 2025	ES2510623	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Clay Pools	Receptor	0021_SW080	0021_SW080_251023	23 Oct 2025	ES2533538	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05

Statistics												
Number of Results						73	73	73	73	73	73	73
Number of Detects						0	0	0	0	0	2	0
Minimum Concentration						<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.001
Minimum Detect						ND	ND	ND	ND	ND	0.008	ND
Maximum Concentration						<0.1	<0.05	<0.5	<0.05	<0.05	<0.05	<0.05
Maximum Detect						ND	ND	ND	ND	ND	0.009	ND
Average Concentration *						0.019	0.007	0.035	0.017	0.007	0.017	0.01
Geometric Average *						0.0085	0.0036	0.0096	0.008	0.0036	0.008	0.0041
Median Concentration *						0.025	0.01	0.025	0.025	0.01	0.025	0.01
Standard Deviation *						0.015	0.0049	0.066	0.011	0.0049	0.011	0.013
Geometric Standard Deviation *						5.5	4.8	6.6	5.2	4.8	5.2	5.5
95% UCL (Student's-t) *						0.0217	0.008	0.0481	0.0191	0.008	0.0191	0.0128
Number of Env Standard Exceedances						0	0	0	0	0	0	0



	PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
	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
EQL	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
0020_0021_Human health consumption of biota											
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%											
PFAS NEMP 3.0 2025 Recreational water quality											

Number of Env Standard Exceedances (Detects Only)	0	0	0	0	0	0	0	0	0	0	0
% of Detects	0	0	0	0	0	0	0	0	3	0	0
% of Non-Detects	100	100	100	100	100	100	100	100	97	100	100
% of Detects at or above Env Standards	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

* 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 Reported Analyte LOR is higher than Requested Analyte LOR



Appendix B
Table B5d
Historical Water Analytical Results - Flatrock Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids					
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Sum of US EPA PFAS (PFOS + PFOA)*	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPPS)	Perfluoropentane sulfonic acid (PFPeS)
EQL	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
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.0001	0.0005	0.0005	0.0003	0.0003	0.0003	0.01	0.01	0.0005	0.0005	0.01	0.0005	0.01	0.0005
PFAS NEMP 3.0 2025 Recreational water quality	2	2	10		2									

Catchment	SPR	Location	Field ID	Date	Lab Report No.														
Flatrock Creek	Source	0020_MW037	MW037	01 May 2017	ES1710866	0.164	1.53	0.0860	2.81	1.69	2.38	-	-	0.369	<0.0005	-	0.118	-	0.314
Flatrock Creek	Source	0020_MW037	0020_MW037_211018	18 Oct 2021	ES2138638	4.09	9.43	0.56	24.4	13.5	22.2	-	-	1.37	<0.02	-	0.79	-	1.37
Flatrock Creek	Source	0020_MW037	0020_MW037_220404	04 Apr 2022	ES2212597	0.78	12.2	0.60	19.0	13.0	17.5	-	-	0.69	<0.02	-	0.52	-	0.94
Flatrock Creek	Source	0020_MW037	0020_MW037_221010	10 Oct 2022	ES2237104	4.81	10.6	0.80	28.7	15.4	26.4	-	-	1.51	<0.02	-	0.69	-	1.48
Flatrock Creek	Source	0020_MW037	0020_MW037_230417	17 Apr 2023	ES2313254	1.36	11.8	0.64	23.0	13.2	21.2	-	-	0.98	<0.02	-	0.45	-	1.40
Flatrock Creek	Source	0020_MW037	0020_MW037_231016	16 Oct 2023	ES2336397	2.72	9.83	0.73	25.8	12.6	23.9	-	-	1.07	<0.02	-	0.56	-	1.38
Flatrock Creek	Source	0020_MW037	0020_SW037_231016	16 Oct 2023	ES2336397	0.16	0.09	<0.01	0.28	0.25	0.28	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Source	0020_MW037	0020_MW037_240408	08 Apr 2024	ES2411964	3.00	7.17	0.87	28.6	10.2	25.3	-	-	1.35	<0.02	-	0.93	-	1.80
Flatrock Creek	Source	0020_MW037	0020_MW037_241022	22 Oct 2024	ES2435143	3.86	8.73	0.87	34.5	12.6	31.4	-	-	1.46	<0.02	-	0.65	-	1.77
Flatrock Creek	Source	0020_MW037	0020_MW037_250331	31 Mar 2025	ES2510618	2.51	5.16	0.44	18.1	7.67	16.6	-	-	0.90	<0.02	-	0.35	-	0.73
Flatrock Creek	Source	0020_MW037	0020_QC131_250331	31 Mar 2025	ES2510618	2.24	5.67	0.45	18.4	7.91	16.8	-	-	0.86	<0.02	-	0.39	-	0.84
Flatrock Creek	Source	0020_MW037	0020_QC231_250331	31 Mar 2025	1209674	2.2	5.9	0.50	19.02	8.1	17.51	2.7	8.6	0.94	<0.01	<0.01	0.39	0.35	0.77
Flatrock Creek	Source	0020_MW037	0020_MW037_251020	20 Oct 2025	ES2533546	2.62	8.31	0.73	29.1	10.9	26.8	-	-	1.19	<0.02	-	0.53	-	1.24
Flatrock Creek	Source	0020_MW112	F_MW02	01 May 2017	ES1710866	0.0031	0.243	0.0033	0.352	0.246	0.304	-	-	0.0442	<0.0005	-	0.0030	-	0.0449
Flatrock Creek	Source	0020_MW112	0020_MW112_211018	18 Oct 2021	ES2138638	0.06	0.59	0.06	0.99	0.65	0.92	-	-	0.09	<0.02	-	<0.02	-	0.07
Flatrock Creek	Source	0020_MW112	0020_MW112_220404	04 Apr 2022	ES2212597	0.16	0.80	0.09	1.68	0.96	1.55	-	-	0.15	<0.02	-	0.02	-	0.11
Flatrock Creek	Source	0020_MW112	0020_MW112_221010	10 Oct 2022	ES2237104	0.15	0.57	0.07	1.22	0.72	1.15	-	-	0.08	<0.02	-	<0.02	-	0.07
Flatrock Creek	Source	0020_MW112	0020_MW112_230417	17 Apr 2023	ES2313254	0.26	1.30	0.15	2.85	1.56	2.61	-	-	0.18	<0.02	-	0.03	-	0.21
Flatrock Creek	Source	0020_MW112	0020_MW112_231016	16 Oct 2023	ES2336397	0.06	1.10	0.08	2.16	1.16	1.97	-	-	0.19	<0.02	-	<0.02	-	0.19
Flatrock Creek	Source	0020_MW112	0020_MW112_240408	08 Apr 2024	ES2411964	0.19	0.74	0.07	1.48	0.93	1.35	-	-	0.13	<0.02	-	<0.02	-	0.10
Flatrock Creek	Source	0020_MW112	0020_MW112_241021	21 Oct 2024	ES2435143	0.06	0.84	0.08	1.80	0.90	1.65	-	-	0.12	<0.02	-	<0.02	-	0.12
Flatrock Creek	Source	0020_MW112	0020_QC251_241021	21 Oct 2024	1154740	0.05	1.1	0.07	2.09	1.15	1.9	0.12	1.22	0.15	<0.01	<0.01	0.01	0.04	0.14
Flatrock Creek	Source	0020_MW112	0020_MW112_250331	31 Mar 2025	ES2510618	0.14	0.47	0.05	0.95	0.61	0.90	-	-	0.06	<0.02	-	<0.02	-	0.05
Flatrock Creek	Source	0020_MW112	0020_QC130_250331	31 Mar 2025	ES2510618	0.07	0.41	0.04	0.77	0.48	0.73	-	-	0.05	<0.02	-	<0.02	-	0.04
Flatrock Creek	Source	0020_MW112	0020_QC230_250331	31 Mar 2025	1209674	0.08	0.46	0.06	0.9	0.54	0.85	0.14	0.6	0.05	<0.01	<0.01	<0.01	0.01	0.04
Flatrock Creek	Source	0020_MW112	0020_MW112_251020	20 Oct 2025	ES2533546	0.12	1.09	0.10	2.11	1.21	1.96	-	-	0.13	<0.02	-	<0.02	-	0.12
Flatrock Creek	Source	0020_SW016	E_Irrigation_03	26 Oct 2017	ES1726858	0.155	0.0363	0.0099	0.242	0.191	0.234	-	-	0.0030	<0.0005	-	0.0044	-	0.0044
Flatrock Creek	Source	0020_SW016	TNQA301	26 Oct 2017	569797	0.18 ^{#1}	0.068 ^{#1}	0.007	0.321	0.248	0.308	-	-	0.006	<0.001	-	0.004	-	0.009
Flatrock Creek	Source	0020_SW016	0020_SW016_211018	18 Oct 2021	ES2138638	0.59	0.35	0.02	1.10	0.94	1.07	-	-	0.04	<0.02	-	<0.02	-	0.03
Flatrock Creek	Source	0020_SW016	0020_SW016_220408	08 Apr 2022	ES2212597	0.73	0.34	0.02	1.24	1.07	1.20	-	-	0.02	<0.02	-	0.02	-	0.02
Flatrock Creek	Source	0020_SW016	0020_SW016_221011	11 Oct 2022	ES2237104	0.58	0.35	0.04	1.09	0.93	1.07	-	-	0.04	<0.02	-	<0.02	-	0.02
Flatrock Creek	Source	0020_SW016	0020_SW016_230417	17 Apr 2023	ES2313254	0.55	0.39	0.02	1.10	0.94	1.07	-	-	0.04	<0.02	-	<0.02	-	0.03
Flatrock Creek	Source	0020_SW016	0020_SW016_231016	16 Oct 2023	ES2336397	0.18	0.09	<0.01	0.30	0.27	0.30	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Source	0020_SW016	0020_SW016_240408	08 Apr 2024	ES2411964	0.82	0.30	0.01	1.30	1.12	1.26	-	-	0.08	<0.02	-	0.02	-	0.02
Flatrock Creek	Source	0020_SW016	0020_SW016_241021	21 Oct 2024	ES2435143	0.41	0.19	0.02	0.65	0.60	0.65	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Source	0020_SW016	0020_SW016_250331	31 Mar 2025	ES2510618	0.60	0.15	<0.01	0.78	0.75	0.78	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Source	0020_SW016	0020_SW016_251020	20 Oct 2025	ES2533546	0.29	0.20	0.02	0.58	0.49	0.58	-	-	0.03	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Source	0021_MW026	MW026	28 Apr 2017	ES1710200	0.0010	0.0074	<0.0005	0.0112	0.0084	0.0102	-	-	0.0013	<0.0005	-	<0.0005	-	0.0010
Flatrock Creek	Source	0021_MW026	0021_MW026_190214	14 Feb 2019	ES1905115	0.0100	0.0061	<0.0005	0.0404	0.0161	0.0382	-	-	0.0020	<0.0005	-	<0.0005	-	0.0022
Flatrock Creek	Source	0021_MW026	0021_QC110_190214	14 Feb 2019	ES1905115	0.0108	0.0056	<0.0005	0.0362	0.0164	0.0347	-	-	0.0012	<0.0005	-	<0.0005	-	0.0015
Flatrock Creek	Source	0021_MW026	0021_MW026_190529	29 May 2019	ES1916831	0.0008	0.0042	<0.0005	0.0127	0.0050	0.0106	-	-	0.0009	<0.0005	-	<0.0005	-	0.0021
Flatrock Creek	Source	0021_MW026	0021_MW026_211020	20 Oct 2021	ES2138639	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Source	0021_MW026	0021_MW026_220406	06 Apr 2022	ES2212442	<0.01	0.02	<0.01	0.02	0.02	0.02	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Source	0021_MW026	0021_MW026_221014	14 Oct 2022	ES2237106	<0.01	0.01	<0.01	0.01	0.01	0.01	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Source	0021_MW026	0021_MW026_230421	21 Apr 2023	ES2313364	<0.01	0.01	<0.01	0.01	0.01	0.01	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Source	0021_MW026	0021_MW026_231019	19 Oct 2023	ES2336398	<0.01	0.01	<0.01	0.01	0.01	0.01	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Source	0021_MW026	0021_MW026_240412	12 Apr 2024	ES2411994	<0.01	0.01	<0.01	0.01	0.01	0.01	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Source	0021_MW026	0021_MW026_241022	22 Oct 2024	ES2435078	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Source	0021_MW026	0021_QC104_241022	22 Oct 2024	ES2435078	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Source	0021_MW026	0021_QC204_241022	22 Oct 2024	1154751	<0.01	<0.01	<0.01	<0.1	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Flatrock Creek	Source	0021_MW026	0021_MW026_250407	07 Apr 2025	ES2510113	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-	<0.02



Appendix B
Table B5d
Historical Water Analytical Results - Flatrock Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids					
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Sum of US EPA PFAS (PFOS + PFOA)*	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)
EQL	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
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.0001	0.0005	0.0005	0.0003	0.0003	0.0003	0.01	0.01	0.0005	0.0005	0.01	0.0005	0.01	0.0005
PFAS NEMP 3.0 2025 Recreational water quality	0.13		220											
	2	2	10		2									

Catchment	SPR	Location	Field ID	Date	Lab Report No.													
Flatrock Creek	Source	0021_MW026	0021_MW026_251021	21 Oct 2025	ES2533521	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Source	0021_MW117	C_MW01	03 May 2017	ES1710866	0.0389	0.106	0.0046	0.220	0.145	0.201	-	-	0.0123	<0.0005	-	0.0034	-
Flatrock Creek	Source	0021_MW117	0021_MW117_211020	20 Oct 2021	ES2138639	0.16	0.33	<0.01	0.60	0.49	0.54	-	-	0.05	<0.02	-	<0.02	-
Flatrock Creek	Source	0021_MW117	0021_QC203_211020	20 Oct 2021	281322	0.12	0.32	<0.01	0.57	0.45	-	0.12	-	0.07	<0.02	-	<0.01	-
Flatrock Creek	Source	0021_MW117	0021_MW117_221014	14 Oct 2022	ES2237106	0.07	0.24	<0.01	0.34	0.31	0.31	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Source	0021_MW117	0021_MW117_230421	21 Apr 2023	ES2313364	0.10	0.28	<0.01	0.44	0.38	0.40	-	-	0.02	<0.02	-	<0.02	-
Flatrock Creek	Source	0021_MW117	0021_MW117_231019	19 Oct 2023	ES2336398	0.14	0.26	<0.01	0.46	0.40	0.44	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Source	0021_MW117	0021_MW117_240412	12 Apr 2024	ES2411994	0.06	0.17	<0.01	0.23	0.23	0.23	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Source	0021_MW117	0021_MW117_241022	22 Oct 2024	ES2435078	0.04	0.12	<0.01	0.18	0.16	0.16	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Source	0021_MW117	0021_MW117_250402	02 Apr 2025	ES2510113	0.04	0.17	<0.01	0.23	0.21	0.21	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Source	0021_MW117	0021_MW117_251021	21 Oct 2025	ES2533521	0.04	0.10	<0.01	0.14	0.14	0.14	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Source	0021_MW118	C_MW02	03 May 2017	ES1710866	0.0139	0.0306	0.0009	0.0589	0.0445	0.0531	-	-	0.0040	<0.0005	-	<0.0005	-
Flatrock Creek	Source	0021_MW118	0021_MW118_211026	26 Oct 2021	ES2138639	0.87	1.35	0.02	2.58	2.22	2.42	-	-	0.06	<0.02	-	0.03	-
Flatrock Creek	Source	0021_MW118	0021_MW118_221011	11 Oct 2022	ES2237106	0.80	1.14	0.01	2.16	1.94	2.07	-	-	0.05	<0.02	-	<0.02	-
Flatrock Creek	Source	0021_MW118	0021_MW118_230203	03 Feb 2023	ES2303695	0.94	1.05	0.02	2.19	1.99	2.10	-	-	0.03	<0.02	-	0.02	-
Flatrock Creek	Source	0021_MW118	0021_MW118_230421	21 Apr 2023	ES2313364	1.43	1.80	0.03	3.56	3.23	3.39	-	-	0.05	<0.02	-	0.04	-
Flatrock Creek	Source	0021_MW118	0021_MW118_231019	19 Oct 2023	ES2336398	0.82	0.50	0.01	1.40	1.32	1.36	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Source	0021_MW118	0021_MW118_240412	12 Apr 2024	ES2411994	0.26	0.45	<0.01	0.73	0.71	0.71	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Source	0021_MW118	0021_MW118_241022	22 Oct 2024	ES2435078	0.42	0.49	<0.01	1.01	0.91	0.96	-	-	0.02	<0.02	-	<0.02	-
Flatrock Creek	Source	0021_MW118	0021_MW118_250402	02 Apr 2025	ES2510113	0.64	0.53	<0.01	1.22	1.17	1.19	-	-	0.02	<0.02	-	<0.02	-
Flatrock Creek	Source	0021_MW118	0021_MW118_251021	21 Oct 2025	ES2533521	0.44	0.50	<0.01	1.00	0.94	0.96	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Source	0021_MW118	0021_QC140_251021	21 Oct 2025	ES2533538	0.42	0.50	0.01	0.99	0.92	0.96	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Source	0021_MW118	0021_QC240_251021	21 Oct 2025	1285374	0.45 ^{#1}	0.46 ^{#1}	<0.01	1.0	0.91	0.96	-	-	0.02	<0.01	<0.01	0.01 ^{#1}	0.03 ^{#1}
Flatrock Creek	Pathway	0020_MW001	MW001	08 May 2017	ES1711220	0.0526	0.0309	0.0012	0.0963	0.0835	0.0904	-	-	0.0032	<0.0005	-	0.0026	-
Flatrock Creek	Pathway	0020_MW001	0020_MW001_220412	12 Apr 2022	ES2213152	<0.01	0.03	<0.01	0.03	0.03	0.03	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0020_MW001	0020_MW001_221010	10 Oct 2022	ES2236866	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0020_MW001	0020_MW001_230131	31 Jan 2023	ES2303447	0.02	0.02	<0.01	0.04	0.04	0.04	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0020_MW001	0020_QC201_230131	31 Jan 2023	961653	0.01	0.02	<0.01	<0.1	0.03	<0.05	0.01	0.03	<0.01	<0.01	<0.01	<0.01	<0.01
Flatrock Creek	Pathway	0020_MW001	0020_MW001_250407	07 Apr 2025	ES2510618	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0020_MW001	0020_MW001_251023	23 Oct 2025	ES2533546	<0.01	0.02	<0.01	0.02	0.02	0.02	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0020_MW007	0020_MW007_180411	11 Apr 2018	ES1810721	0.118	0.136	0.0096	0.322	0.254	0.304	-	-	0.0096	<0.0005	-	0.0055	-
Flatrock Creek	Pathway	0020_MW007	0020_MW007_211015	15 Oct 2021	ES2138638	0.08	0.02	<0.01	0.10	0.10	0.10	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0020_MW007	0020_QC100_211015	15 Oct 2021	ES2138638	0.04	0.02	<0.01	0.06	0.06	0.06	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0020_MW007	0020_MW007_220404	04 Apr 2022	ES2212597	0.08	0.08	<0.01	0.16	0.16	0.16	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0020_MW007	0020_MW007_221010	10 Oct 2022	ES2237104	0.31	0.28	0.01	0.62	0.59	0.62	-	-	0.02	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0020_MW007	0020_MW007_230131	31 Jan 2023	ES2303447	0.20	0.24	<0.01	0.50	0.44	0.47	-	-	0.03	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0020_MW007	0020_MW007_230417	17 Apr 2023	ES2313254	0.30	0.35	0.01	0.80	0.65	0.72	-	-	0.04	<0.02	-	0.02	-
Flatrock Creek	Pathway	0020_MW007	0020_MW007_231016	16 Oct 2023	ES2336397	0.07	0.12	<0.01	0.19	0.19	0.19	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0020_MW007	0020_MW007_240408	08 Apr 2024	ES2411964	0.11	0.14	<0.01	0.28	0.25	0.28	-	-	0.03	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0020_MW007	0020_MW007_250407	07 Apr 2025	ES2510618	0.10	0.14	<0.01	0.28	0.24	0.28	-	-	0.04	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0020_MW007	0020_MW007_251023	23 Oct 2025	ES2533546	0.10	0.08	<0.01	0.18	0.18	0.18	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0020_MW007	0020_QC105_251023	23 Oct 2025	ES2533546	0.16	0.08	<0.01	0.24	0.24	0.24	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0020_MW007	0020_QC205_251023	23 Oct 2025	1285219	0.11 ^{#1}	0.08 ^{#1}	<0.01	0.2	0.19	0.19	-	-	<0.01	<0.01	<0.01	<0.01	<0.01
Flatrock Creek	Pathway	0020_MW017	MW017	01 May 2017	ES1710866	1.04	0.530	0.0328	1.91	1.57	1.74	-	-	0.0488	0.0078	-	0.0878	-
Flatrock Creek	Pathway	0020_MW017	0020_MW017_211015	15 Oct 2021	ES2138638	0.72	0.37	0.02	1.32	1.09	1.26	-	-	0.03	<0.02	-	0.03	-
Flatrock Creek	Pathway	0020_MW017	0020_MW017_220404	04 Apr 2022	ES2212597	0.87	0.41	0.02	1.49	1.28	1.42	-	-	0.03	<0.02	-	0.04	-
Flatrock Creek	Pathway	0020_MW017	0020_MW017_221011	11 Oct 2022	ES2237104	0.78	0.21	0.03	1.09	0.99	1.09	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0020_MW017	0020_MW017_230201	01 Feb 2023	ES2303447	0.98	0.42	0.03	1.69	1.40	1.62	-	-	0.02	<0.02	-	0.04	-
Flatrock Creek	Pathway	0020_MW017	0020_MW017_230417	17 Apr 2023	ES2313254	1.33	0.50	0.04	2.16	1.83	2.08	-	-	0.02	<0.02	-	0.04	-
Flatrock Creek	Pathway	0020_MW017	0020_QC104_230417	17 Apr 2023	ES2313254	1.12	0.41	0.03	1.78	1.53	1.72	-	-	0.02	<0.02	-	0.04	-
Flatrock Creek	Pathway	0020_MW017	0020_QC204_230417	17 Apr 2023	321518	0.94	0.41	0.03	1.6	1.4	-	0.97	-	0.02	<0.02	-	0.03	-



Appendix B
Table B5d
Historical Water Analytical Results - Flatrock Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids					
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Sum of US EPA PFAS (PFOS + PFOA)*	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)
EQL	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
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.0001	0.0005	0.0005	0.0003	0.0003	0.0003	0.01	0.01	0.0005	0.0005	0.01	0.0005	0.01	0.0005
PFAS NEMP 3.0 2025 Recreational water quality	0.13		220											
	2	2	10		2									

Catchment	SPR	Location	Field ID	Date	Lab Report No.													
Flatrock Creek	Pathway	0020_MW017	0020_MW017_231016	16 Oct 2023	ES2336397	0.64	0.22	0.02	0.99	0.86	0.99	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0020_MW017	0020_MW017_240408	08 Apr 2024	ES2411964	1.03	0.32	0.02	1.49	1.35	1.44	-	-	<0.02	<0.02	-	0.03	-
Flatrock Creek	Pathway	0020_MW017	0020_MW017_241021	21 Oct 2024	ES2435143	0.79	0.69	0.05	1.73	1.48	1.66	-	-	<0.02	<0.02	-	0.05	-
Flatrock Creek	Pathway	0020_MW017	0020_MW017_250331	31 Mar 2025	ES2510618	0.98	0.27	0.01	1.31	1.25	1.29	-	-	<0.02	<0.02	-	0.02	-
Flatrock Creek	Pathway	0020_MW017	0020_MW017_251020	20 Oct 2025	ES2533546	0.48	0.28	0.02	0.87	0.76	0.83	-	-	<0.02	<0.02	-	0.02	-
Flatrock Creek	Pathway	0020_MW068	0020_MW068_221010	10 Oct 2022	ES2236866	<0.01	0.19	<0.01	0.19	0.19	0.19	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0020_MW068	0020_MW068_230131	31 Jan 2023	ES2303447	<0.01	0.10	<0.01	0.17	0.10	0.17	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0020_MW068	0020_MW068_241021	21 Oct 2024	ES2435143	<0.01	0.08	<0.01	0.08	0.08	0.08	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0020_MW068	0020_MW068_250401	01 Apr 2025	ES2510618	<0.01	0.14	<0.01	0.14	0.14	0.14	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0020_MW068	0020_MW068_251020	20 Oct 2025	ES2533546	<0.01	0.09	<0.01	0.09	0.09	0.09	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0020_MW069	0020_MW069_250424	24 Apr 2025	ES2512752	0.06	0.03	<0.01	0.09	0.09	0.09	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0020_MW069	0020_MW069_251020	20 Oct 2025	ES2533546	0.01	0.01	<0.01	0.02	0.02	0.02	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0020_MW109	E_MW04	01 May 2017	ES1710866	0.228	0.146	0.0057	0.449	0.374	0.413	-	-	0.0087	<0.0005	-	0.0231	-
Flatrock Creek	Pathway	0020_MW109	E_MW04_180503	03 May 2018	ES1812871	4.46	1.30	0.06	6.23	5.76	6.09	-	-	0.04	<0.02	-	0.06	-
Flatrock Creek	Pathway	0020_MW109	0020_MW109_211015	15 Oct 2021	ES2138638	0.62	0.48	0.01	1.45	1.10	1.37	-	-	0.03	<0.02	-	0.05	-
Flatrock Creek	Pathway	0020_MW109	0020_MW109_220404	04 Apr 2022	ES2212597	0.53	0.30	0.02	1.04	0.83	1.01	-	-	0.02	<0.02	-	0.03	-
Flatrock Creek	Pathway	0020_MW109	0020_QC100_220404	04 Apr 2022	ES2212597	0.51	0.30	0.02	1.00	0.81	0.97	-	-	<0.02	<0.02	-	0.03	-
Flatrock Creek	Pathway	0020_MW109	0020_QC200_220404	04 Apr 2022	293030	0.62	0.32	0.02	1.2	0.95	-	0.65	-	0.02	<0.02	-	0.03	-
Flatrock Creek	Pathway	0020_MW109	0020_MW109_221011	11 Oct 2022	ES2237104	0.84	0.22	0.03	1.29	1.06	1.27	-	-	<0.02	<0.02	-	0.02	-
Flatrock Creek	Pathway	0020_MW109	0020_MW109_230131	31 Jan 2023	ES2303447	0.78	0.42	0.03	1.55	1.20	1.48	-	-	<0.02	<0.02	-	0.05	-
Flatrock Creek	Pathway	0020_MW109	0020_QC101_230131	31 Jan 2023	ES2303447	0.85	0.41	0.04	1.60	1.26	1.55	-	-	<0.02	<0.02	-	0.05	-
Flatrock Creek	Pathway	0020_MW109	0020_MW109_230417	17 Apr 2023	ES2313254	1.26	0.70	0.06	2.43	1.96	2.30	-	-	0.02	<0.02	-	0.09	-
Flatrock Creek	Pathway	0020_MW109	0020_MW109_231016	16 Oct 2023	ES2336397	0.69	0.28	0.02	1.24	0.97	1.20	-	-	<0.02	<0.02	-	0.04	-
Flatrock Creek	Pathway	0020_MW109	0020_MW109_240408	08 Apr 2024	ES2411964	0.57	0.31	0.01	1.06	0.88	0.99	-	-	0.04	<0.02	-	0.03	-
Flatrock Creek	Pathway	0020_MW109	0020_QC100_240408	08 Apr 2024	ES2411964	1.21	0.44	0.03	1.97	1.65	1.89	-	-	<0.02	<0.02	-	0.06	-
Flatrock Creek	Pathway	0020_MW109	0020_QC200_240408	08 Apr 2024	348827	0.89	0.39	0.03	1.7	1.3	-	0.91	-	0.02	<0.02	-	0.06	-
Flatrock Creek	Pathway	0020_MW109	0020_MW109_241021	21 Oct 2024	ES2435143	0.80	0.27	0.03	1.28	1.07	1.25	-	-	<0.02	<0.02	-	0.03	-
Flatrock Creek	Pathway	0020_MW109	0020_MW109_250331	31 Mar 2025	ES2510618	1.20	0.39	0.03	1.87	1.59	1.78	-	-	<0.02	<0.02	-	0.07	-
Flatrock Creek	Pathway	0020_MW109	0020_MW109_251020	20 Oct 2025	ES2533546	0.66	0.28	0.02	1.04	0.94	1.02	-	-	<0.02	<0.02	-	0.02	-
Flatrock Creek	Pathway	0020_MW109	0020_QC140_251020	20 Oct 2025	ES2533546	0.80	0.29	0.02	1.19	1.09	1.17	-	-	<0.02	<0.02	-	0.02	-
Flatrock Creek	Pathway	0020_MW109	0020_QC240_251020	20 Oct 2025	1285219	0.92 ^{#1}	0.27 ^{#1}	0.02 ^{#1}	1.4	1.19	1.3	-	-	0.01	<0.01	<0.01	0.04 ^{#1}	<0.01
Flatrock Creek	Pathway	0020_MW110	E_MW05	01 May 2017	ES1710866	0.292	0.860	0.0299	1.43	1.15	1.29	-	-	0.0360	<0.0005	-	0.0782	-
Flatrock Creek	Pathway	0020_MW110	0020_MW110_211015	15 Oct 2021	ES2138638	2.23	4.08	0.13	8.28	6.31	7.58	-	-	0.30	<0.02	-	0.18	-
Flatrock Creek	Pathway	0020_MW110	0020_MW110_220404	04 Apr 2022	ES2212597	1.51	4.29	0.13	8.03	5.80	7.48	-	-	0.27	<0.02	-	0.21	-
Flatrock Creek	Pathway	0020_MW110	0020_QC102_220404	04 Apr 2022	ES2212597	1.67	4.40	0.12	8.26	6.07	7.69	-	-	0.26	<0.02	-	0.22	-
Flatrock Creek	Pathway	0020_MW110	0020_QC202_220404	04 Apr 2022	293030	2.1	4.7	0.15	9.2	6.8	-	2.2	-	0.27	<0.02	-	0.22	-
Flatrock Creek	Pathway	0020_MW110	0020_MW110_221011	11 Oct 2022	ES2237104	3.21	1.78	0.17	6.81	4.99	6.51	-	-	0.03	<0.02	-	0.23	-
Flatrock Creek	Pathway	0020_MW110	0020_MW110_230131	31 Jan 2023	ES2303447	4.27	1.53	0.15	7.56	5.80	7.33	-	-	0.03	<0.02	-	0.16	-
Flatrock Creek	Pathway	0020_MW110	0020_MW110_230417	17 Apr 2023	ES2313254	5.20	1.35	0.16	7.92	6.55	7.69	-	-	0.04	<0.02	-	0.16	-
Flatrock Creek	Pathway	0020_MW110	0020_MW110_231016	16 Oct 2023	ES2336397	4.56	0.97	0.09	6.09	5.53	5.95	-	-	0.04	<0.02	-	0.09	-
Flatrock Creek	Pathway	0020_MW110	0020_MW110_240408	08 Apr 2024	ES2411964	4.36	1.63	0.13	6.78	5.99	6.55	-	-	0.06	<0.02	-	0.14	-
Flatrock Creek	Pathway	0020_MW110	0020_MW110_241021	21 Oct 2024	ES2435143	4.56	0.61	0.06	5.98	5.17	5.89	-	-	0.02	<0.02	-	0.06	-
Flatrock Creek	Pathway	0020_MW110	0020_QC250_241021	21 Oct 2024	1154740	5.9	0.78	0.06	7.55	6.68	7.43	5.96	6.74	0.03	<0.01	0.01	0.08	<0.01
Flatrock Creek	Pathway	0020_MW110	0020_MW110_250331	31 Mar 2025	ES2510618	3.95	1.02	0.07	5.43	4.97	5.27	-	-	0.04	<0.02	-	0.12	-
Flatrock Creek	Pathway	0020_MW110	0020_MW110_251020	20 Oct 2025	ES2533546	4.20	0.59	0.07	6.01	4.79	5.90	-	-	<0.02	<0.02	-	0.09	-
Flatrock Creek	Pathway	0020_SW023	F_SW02	10 Apr 2017	ES1708884	0.429	0.537	0.0414	1.74	0.966	1.48	-	-	0.0594	<0.0005	-	0.0404	-
Flatrock Creek	Pathway	0020_SW023	0020_SW023_211019	19 Oct 2021	ES2138638	0.29	0.06	0.01	0.55	0.35	0.55	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0020_SW023	0020_SW023_211213	13 Dec 2021	ES2145964	0.78	0.17	0.03	1.49	0.95	1.47	-	-	0.03	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0020_SW023	0020_SW023_220404	04 Apr 2022	ES2212597	0.98	0.78	0.04	2.94	1.76	2.86	-	-	0.08	<0.02	-	0.03	-
Flatrock Creek	Pathway	0020_SW023	0020_SW023_220708	08 Jul 2022	ES2224472	1.33	0.86	0.04	3.10	2.19	2.95	-	-	0.19	<0.02	-	0.03	-
Flatrock Creek	Pathway	0020_SW023	0020_SW023_221010	10 Oct 2022	ES2237104	1.40	0.56	0.03	2.42	1.96	2.36	-	-	0.04	<0.02	-	0.03	-



Appendix B
Table B5d
Historical Water Analytical Results - Flatrock Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids					
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Sum of US EPA PFAS (PFOS + PFOA)*	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)
EQL	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
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.0001	0.0005	0.0005	0.0003	0.0003	0.0003	0.01	0.01	0.0005	0.0005	0.01	0.0005	0.01	0.0005
PFAS NEMP 3.0 2025 Recreational water quality	0.13		220											
	2	2	10		2									

Catchment	SPR	Location	Field ID	Date	Lab Report No.													
Flatrock Creek	Pathway	0020_SW023	0020_SW023_230417	17 Apr 2023	ES2313254	0.24	0.25	0.01	0.73	0.49	0.71	-	-	0.04	<0.02	-	<0.02	0.02
Flatrock Creek	Pathway	0020_SW023	0020_SW023_240408	08 Apr 2024	ES2411964	0.30	0.43	0.03	1.43	0.73	1.35	-	-	0.07	<0.02	-	<0.02	0.05
Flatrock Creek	Pathway	0020_SW023	0020_SW023_250331	31 Mar 2025	ES2510618	0.20	0.10	<0.01	0.44	0.30	0.44	-	-	<0.02	<0.02	-	<0.02	<0.02
Flatrock Creek	Pathway	0020_SW030	FC_SW05	20 Apr 2017	ES1709644	0.0520	0.0573	0.0010	0.124	0.109	0.117	-	-	0.0034	<0.0005	-	0.0021	0.0046
Flatrock Creek	Pathway	0020_SW030	FC_QC113_180430	30 Apr 2018	ES1812871	0.10	0.16	<0.01	0.26	0.26	0.26	-	-	<0.02	<0.02	-	<0.02	<0.02
Flatrock Creek	Pathway	0020_SW030	FC_SW05_180430	30 Apr 2018	ES1812871	0.0962	0.125	<0.0020 ^{#2}	0.246	0.221	0.234	-	-	0.0076	<0.0020 ^{#2}	-	0.0022	0.0100
Flatrock Creek	Pathway	0020_SW030	0020_QC204_211019	19 Oct 2021	281319	0.08	0.13	<0.01	0.20	0.20	-	0.08	-	<0.01	<0.02	-	<0.01	<0.01
Flatrock Creek	Pathway	0020_SW030	0020_SW030_211019	19 Oct 2021	ES2138638	0.08	0.12	<0.01	0.20	0.20	0.20	-	-	<0.02	<0.02	-	<0.02	<0.02
Flatrock Creek	Pathway	0020_SW030	0020_SW030_220404	04 Apr 2022	ES2212597	0.05	0.05	<0.01	0.10	0.10	0.10	-	-	<0.02	<0.02	-	<0.02	<0.02
Flatrock Creek	Pathway	0020_SW030	0020_SW030_220412	12 Apr 2022	ES2213152	0.06	0.06	<0.01	0.12	0.12	0.12	-	-	<0.02	<0.02	-	<0.02	<0.02
Flatrock Creek	Pathway	0020_SW030	0020_QC104_220708	08 Jul 2022	ES2224472	0.06	0.06	<0.01	0.12	0.12	0.12	-	-	<0.02	<0.02	-	<0.02	<0.02
Flatrock Creek	Pathway	0020_SW030	0020_QC204_220708	08 Jul 2022	905319	0.05 ^{#1}	0.05 ^{#1}	<0.01	0.1	0.1	0.1	0.05	0.1	<0.01	<0.01	-	<0.01	<0.01
Flatrock Creek	Pathway	0020_SW030	0020_SW030_220708	08 Jul 2022	ES2224472	0.05	0.05	<0.01	0.10	0.10	0.10	-	-	<0.02	<0.02	-	<0.02	<0.02
Flatrock Creek	Pathway	0020_SW030	0020_SW030_221012	12 Oct 2022	ES2236866	0.07	0.07	<0.01	0.14	0.14	0.14	-	-	<0.02	<0.02	-	<0.02	<0.02
Flatrock Creek	Pathway	0020_SW030	0020_SW030_221012	12 Oct 2022	ES2237104	0.05	0.06	<0.01	0.11	0.11	0.11	-	-	<0.02	<0.02	-	<0.02	<0.02
Flatrock Creek	Pathway	0020_SW030	0020_SW030_230201	01 Feb 2023	ES2303447	0.09	0.11	<0.01	0.20	0.20	0.20	-	-	<0.02	<0.02	-	<0.02	<0.02
Flatrock Creek	Pathway	0020_SW030	0020_QC101_230417	17 Apr 2023	ES2313254	0.07	0.11	<0.01	0.18	0.18	0.18	-	-	<0.02	<0.02	-	<0.02	<0.02
Flatrock Creek	Pathway	0020_SW030	0020_QC201_230417	17 Apr 2023	321518	0.07	0.1	<0.01	0.17	0.17	-	0.07	-	<0.01	<0.02	-	<0.01	<0.01
Flatrock Creek	Pathway	0020_SW030	0020_SW030_230417	17 Apr 2023	ES2313254	0.09	0.10	<0.01	0.19	0.19	0.19	-	-	<0.02	<0.02	-	<0.02	<0.02
Flatrock Creek	Pathway	0020_SW030	0020_SW030_231016	16 Oct 2023	ES2336397	0.04	0.05	<0.01	0.09	0.09	0.09	-	-	<0.02	<0.02	-	<0.02	<0.02
Flatrock Creek	Pathway	0020_SW030	0020_SW030_240408	08 Apr 2024	ES2411964	0.11	0.09	<0.01	0.20	0.20	0.20	-	-	<0.02	<0.02	-	<0.02	<0.02
Flatrock Creek	Pathway	0020_SW030	0020_SW030_241026	26 Oct 2024	ES2435539	0.03	0.04	<0.01	0.07	0.07	0.07	-	-	<0.02	<0.02	-	<0.02	<0.02
Flatrock Creek	Pathway	0020_SW030	0020_SW030_250331	31 Mar 2025	ES2510618	0.07	0.12	<0.01	0.19	0.19	0.19	-	-	<0.02	<0.02	-	<0.02	<0.02
Flatrock Creek	Pathway	0020_SW030	0020_SW030_251022	22 Oct 2025	ES2533546	0.04	0.04	<0.01	0.08	0.08	0.08	-	-	<0.02	<0.02	-	<0.02	<0.02
Flatrock Creek	Pathway	0020_SW054	0020_SW054_220412	12 Apr 2022	ES2213152	0.46	0.32	0.02	1.10	0.78	1.06	-	-	0.02	<0.02	-	0.02	0.02
Flatrock Creek	Pathway	0020_SW054	0020_SW054_220707	07 Jul 2022	ES2224472	0.28	0.20	0.02	0.63	0.48	0.63	-	-	<0.02	<0.02	-	<0.02	<0.02
Flatrock Creek	Pathway	0020_SW054	0020_QC126_221012	12 Oct 2022	ES2236866	0.47	0.27	0.03	0.99	0.74	0.97	-	-	<0.02	<0.02	-	0.02	<0.02
Flatrock Creek	Pathway	0020_SW054	0020_SW054_221012	12 Oct 2022	ES2236866	0.50	0.25	0.03	1.02	0.75	1.00	-	-	<0.02	<0.02	-	0.02	<0.02
Flatrock Creek	Pathway	0020_SW054	0020_QC220_230130	30 Jan 2023	961653	0.53 ^{#1}	0.46 ^{#1}	0.02 ^{#1}	1.33	0.99	1.25	0.55	1.01	0.02	<0.01	<0.01	0.05 ^{#1}	0.03
Flatrock Creek	Pathway	0020_SW054	0020_SW054_230130	30 Jan 2023	ES2303447	0.48	0.46	0.02	1.21	0.94	1.16	-	-	0.02	<0.02	-	0.02	0.03
Flatrock Creek	Pathway	0020_SW054	0020_SW054_241021	21 Oct 2024	ES2435143	0.78	0.37	0.04	1.51	1.15	1.43	-	-	<0.02	<0.02	-	0.06	0.02
Flatrock Creek	Pathway	0020_SW054	0020_SW054_251020	20 Oct 2025	ES2533546	0.54	0.12	0.02	0.74	0.66	0.71	-	-	<0.02	<0.02	-	0.03	<0.02
Flatrock Creek	Pathway	0021_MW125	FC_MW01	04 May 2017	ES1711220	0.0846	0.108	0.0026	0.229	0.193	0.213	-	-	0.0059	<0.0005	-	0.0049	0.0104
Flatrock Creek	Pathway	0021_MW125	FC_MW01_180503	03 May 2018	ES1812871	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	<0.02
Flatrock Creek	Pathway	0021_MW125	FC_MW01_190214	14 Feb 2019	ES1905115	0.0332	0.0839	0.0010	0.165	0.117	0.147	-	-	0.0160	<0.0005	-	0.0005	0.0174
Flatrock Creek	Pathway	0021_MW125	FC_MW01_190529	29 May 2019	ES1916831	0.0612	0.0808	0.0021	0.197	0.142	0.174	-	-	0.0136	<0.0005	-	0.0029	0.0204
Flatrock Creek	Pathway	0021_MW125	0021_MW125_211020	20 Oct 2021	ES2138639	0.04	0.07	<0.01	0.11	0.11	0.11	-	-	<0.02	<0.02	-	<0.02	<0.02
Flatrock Creek	Pathway	0021_MW125	0021_QC207_211020	20 Oct 2021	281322	0.03	0.06	<0.01	0.12	0.09	-	0.03	-	0.01	<0.02	-	<0.01	0.01
Flatrock Creek	Pathway	0021_MW125	0021_MW125_220407	07 Apr 2022	ES2212442	0.03	0.07	<0.01	0.10	0.10	0.10	-	-	<0.02	<0.02	-	<0.02	<0.02
Flatrock Creek	Pathway	0021_MW125	0021_MW125_221014	14 Oct 2022	ES2237106	0.02	0.07	<0.01	0.09	0.09	0.09	-	-	<0.02	<0.02	-	<0.02	<0.02
Flatrock Creek	Pathway	0021_MW125	0021_MW125_230202	02 Feb 2023	ES2303446	0.11	0.09	<0.01	0.20	0.20	0.20	-	-	<0.02	<0.02	-	<0.02	<0.02
Flatrock Creek	Pathway	0021_MW125	0021_QC203_230202	02 Feb 2023	961655	0.14 ^{#1}	0.09 ^{#1}	<0.01	0.26	0.23	0.25	0.14	0.23	0.01	<0.01	<0.01	<0.01	0.01
Flatrock Creek	Pathway	0021_MW125	0021_MW125_230419	19 Apr 2023	ES2313364	0.04	0.11	<0.01	0.15	0.15	0.15	-	-	<0.02	<0.02	-	<0.02	<0.02
Flatrock Creek	Pathway	0021_MW125	0021_QC104_230419	19 Apr 2023	ES2313364	0.03	0.06	<0.01	0.09	0.09	0.09	-	-	<0.02	<0.02	-	<0.02	<0.02
Flatrock Creek	Pathway	0021_MW125	0021_QC204_230419	19 Apr 2023	321517	0.03	0.10	<0.01	0.16	0.14	-	0.03	-	<0.01	<0.02	-	<0.01	0.02
Flatrock Creek	Pathway	0021_MW125	0021_MW125_231018	18 Oct 2023	ES2336398	0.02	0.07	<0.01	0.09	0.09	0.09	-	-	<0.02	<0.02	-	<0.02	<0.02
Flatrock Creek	Pathway	0021_MW125	0021_MW125_240410	10 Apr 2024	ES2411994	0.03	0.08	<0.01	0.11	0.11	0.11	-	-	<0.02	<0.02	-	<0.02	<0.02
Flatrock Creek	Pathway	0021_MW125	0021_MW125_241026	26 Oct 2024	ES2435541	0.02	0.07	<0.01	0.09	0.09	0.09	-	-	<0.02	<0.02	-	<0.02	<0.02
Flatrock Creek	Pathway	0021_MW125	0021_MW125_251022	22 Oct 2025	ES2533521	0.04	0.09	<0.01	0.13	0.13	0.13	-	-	<0.02	<0.02	-	<0.02	<0.02
Flatrock Creek	Pathway	0021_MW126	FC_MW02	04 May 2017	ES1711220	0.0013	0.0028	<0.0005	0.0041	0.0041	0.0041	-	-	<0.0005	<0.0005	-	<0.0005	<0.0005
Flatrock Creek	Pathway	0021_MW126	0021_MW126_211020	20 Oct 2021	ES2138639	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	<0.02



Appendix B
Table B5d
Historical Water Analytical Results - Flatrock Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids					
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Sum of US EPA PFAS (PFOS + PFOA)*	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluorooheptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)
EQL	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
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.0001	0.0005	0.0005	0.0003	0.0003	0.0003	0.01	0.01	0.0005	0.0005	0.01	0.0005	0.01	0.0005
PFAS NEMP 3.0 2025 Recreational water quality	2	2	10		2									

Catchment	SPR	Location	Field ID	Date	Lab Report No.														
Flatrock Creek	Pathway	0021_MW126	0021_QC108_211020	20 Oct 2021	ES2138639	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0021_MW126	0021_MW126_220407	07 Apr 2022	ES2212442	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0021_MW126	0021_QC209_220407	07 Apr 2022	293031	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.01	<0.02	-	<0.01	-	<0.01
Flatrock Creek	Pathway	0021_MW126	0021_MW126_221013	13 Oct 2022	ES2237106	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0021_MW126	0021_MW126_230202	02 Feb 2023	ES2303446	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0021_MW126	0021_MW126_230419	19 Apr 2023	ES2313364	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0021_MW126	0021_MW126_231018	18 Oct 2023	ES2336398	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0021_MW126	0021_QC105_231018	18 Oct 2023	ES2336399	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0021_MW126	0021_QC205_231018	18 Oct 2023	335876	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.01	<0.02	-	<0.01	-	<0.01
Flatrock Creek	Pathway	0021_MW126	0021_MW126_240410	10 Apr 2024	ES2411994	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0021_MW126	0021_MW126_241026	26 Oct 2024	ES2435541	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0021_MW126	0021_QC116_241026	26 Oct 2024	ES2435541	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0021_MW126	0021_QC216_241026	26 Oct 2024	1156160	<0.01	<0.01	<0.01	<0.1	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Flatrock Creek	Pathway	0021_MW126	0021_MW126_250401	01 Apr 2025	ES2510113	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0021_MW126	0021_QC105_250401	01 Apr 2025	ES2510113	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0021_MW126	0021_QC205_250401	01 Apr 2025	1210052	<0.01	<0.01	<0.01	<0.1	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Flatrock Creek	Pathway	0021_MW126	0021_MW126_251022	22 Oct 2025	ES2533521	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0021_MW128	LM_MW01	04 May 2017	ES1711220	0.0012	0.0231	<0.0005	0.0319	0.0243	0.0271	-	-	0.0028	<0.0005	-	<0.0005	-	0.0048
Flatrock Creek	Pathway	0021_MW128	LM_MW01_180503	03 May 2018	ES1812871	1.09	0.72	0.03	2.14	1.81	2.03	-	-	0.03	<0.02	-	0.06	-	0.05
Flatrock Creek	Pathway	0021_MW128	LM_MW01_190214	14 Feb 2019	ES1905115	0.0011	0.0217	<0.0005	0.0283	0.0228	0.0256	-	-	0.0028	<0.0005	-	<0.0005	-	0.0027
Flatrock Creek	Pathway	0021_MW128	0021_QC100_190529	29 May 2019	ES1916831	0.0013	0.0114	<0.0005	0.0179	0.0127	0.0149	-	-	0.0022	<0.0005	-	<0.0005	-	0.0030
Flatrock Creek	Pathway	0021_MW128	LM_MW01_190529	29 May 2019	ES1916831	0.0012	0.0151	<0.0005	0.0224	0.0163	0.0187	-	-	0.0024	<0.0005	-	<0.0005	-	0.0037
Flatrock Creek	Pathway	0021_MW128	0021_MW128_211020	20 Oct 2021	ES2138639	0.04	0.03	<0.01	0.07	0.07	0.07	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0021_MW128	0021_QC107_211020	20 Oct 2021	ES2138639	<0.01	0.02	<0.01	0.02	0.02	0.02	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0021_MW128	0021_MW128_211221	21 Dec 2021	ES2147061	<0.01	0.02	<0.01	0.02	0.02	0.02	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0021_MW128	0021_QC112_211221	21 Dec 2021	ES2147061	<0.01	0.03	<0.01	0.03	0.03	0.03	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0021_MW128	0021_QC212_211221	21 Dec 2021	853283	<0.01	0.02 ^{#1}	<0.01	<0.1	0.02	<0.05	<0.01	0.02	<0.01	<0.01	-	<0.01	<0.01	<0.01
Flatrock Creek	Pathway	0021_MW128	0021_MW128_220406	06 Apr 2022	ES2212442	<0.01	0.04	<0.01	0.04	0.04	0.04	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0021_MW128	0021_MW128_221014	14 Oct 2022	ES2237106	<0.01	0.10	<0.01	0.10	0.10	0.10	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0021_MW128	0021_MW128_230201	01 Feb 2023	ES2303446	<0.01	0.03	<0.01	0.03	0.03	0.03	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0021_MW128	0021_MW128_230419	19 Apr 2023	ES2313364	<0.01	0.05	<0.01	0.05	0.05	0.05	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0021_MW128	0021_MW128_231018	18 Oct 2023	ES2336398	<0.01	0.06	<0.01	0.06	0.06	0.06	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0021_MW128	0021_MW128_240410	10 Apr 2024	ES2411994	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0021_MW128	0021_QC104_240410	10 Apr 2024	ES2411994	<0.01	0.03	<0.01	0.03	0.03	0.03	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0021_MW128	0021_QC204_240410	10 Apr 2024	348825	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.01	<0.02	-	<0.01	-	<0.01
Flatrock Creek	Pathway	0021_MW128	0021_MW128_241023	23 Oct 2024	ES2435078	<0.01	0.10	<0.01	0.10	0.10	0.10	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0021_MW128	0021_MW128_250402	02 Apr 2025	ES2510113	<0.01	0.04	<0.01	0.04	0.04	0.04	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0021_MW128	0021_QC155_250402	02 Apr 2025	ES2510113	<0.01	0.03	<0.01	0.03	0.03	0.03	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0021_MW128	0021_MW128_251021	21 Oct 2025	ES2533521	<0.01	0.05	<0.01	0.05	0.05	0.05	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0021_MW160	0021_MW160_211221	21 Dec 2021	ES2147061	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0021_MW160	0021_MW160_241023	23 Oct 2024	ES2435078	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0021_MW160	0021_QC105_241023	23 Oct 2024	ES2435078	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0021_MW160	0021_QC205_241023	23 Oct 2024	1154751	<0.01	<0.01	<0.01	<0.1	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Flatrock Creek	Pathway	0021_MW160	0021_MW160_250402	02 Apr 2025	ES2510113	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0021_MW160	0021_QC254_250402	02 Apr 2025	1210052	<0.01	<0.01	<0.01	<0.1	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Flatrock Creek	Pathway	0021_MW160	0021_MW160_251021	21 Oct 2025	ES2533521	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0021_MW163	0021_MW163_220411	11 Apr 2022	ES2213156	0.77	0.31	0.03	1.41	1.08	1.39	-	-	0.02	<0.02	-	<0.02	-	0.02
Flatrock Creek	Pathway	0021_MW163	0021_MW163_221011	11 Oct 2022	ES2236834	0.40	0.09	0.06	0.80	0.49	0.80	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0021_MW163	0021_MW163_230202	02 Feb 2023	ES2303446	0.57	0.18	0.04	0.94	0.75	0.94	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0021_MW163	0021_QC103_230202	02 Feb 2023	ES2303446	0.48	0.16	0.03	0.79	0.64	0.79	-	-	<0.02	<0.02	-	<0.02	-	<0.02
Flatrock Creek	Pathway	0021_MW163	0021_MW163_241023	23 Oct 2024	ES2435078	1.62	0.15	0.02	1.88	1.77	1.85	-	-	0.03	<0.02	-	<0.02	-	0.03



Appendix B
Table B5d
Historical Water Analytical Results - Flatrock Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids					
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Sum of US EPA PFAS (PFOS + PFOA)*	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPPS)	Perfluoropentane sulfonic acid (PFPeS)
EQL	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
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.0001	0.0005	0.0005	0.0003	0.0003	0.0003	0.01	0.01	0.0005	0.0005	0.01	0.0005	0.01	0.0005
PFAS NEMP 3.0 2025 Recreational water quality	0.13		220											
	2	2	10		2									

Catchment	SPR	Location	Field ID	Date	Lab Report No.													
Flatrock Creek	Pathway	0021_MW163	0021_MW163_250402	02 Apr 2025	ES2510113	0.51	0.12	<0.01	0.63	0.63	0.63	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0021_MW163	0021_MW163_251022	22 Oct 2025	ES2533521	0.59	0.09	<0.01	0.72	0.68	0.72	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0021_MW164	0021_MW164_220411	11 Apr 2022	ES2213156	9.73	1.61	0.09	12.0	11.3	11.9	-	-	0.02	<0.02	-	0.06	-
Flatrock Creek	Pathway	0021_MW164	0021_QC100_220411	11 Apr 2022	ES2213156	7.58	1.59	0.08	9.80	9.17	9.68	-	-	0.02	<0.02	-	0.06	-
Flatrock Creek	Pathway	0021_MW164	0021_MW164_221011	11 Oct 2022	ES2236834	7.10	0.97	0.05	8.58	8.07	8.49	-	-	<0.02	<0.02	-	0.04	-
Flatrock Creek	Pathway	0021_MW164	0021_QC125_221011	11 Oct 2022	ES2236834	7.92	0.92	0.06	9.31	8.84	9.22	-	-	<0.02	<0.02	-	0.05	-
Flatrock Creek	Pathway	0021_MW164	0021_MW164_230203	03 Feb 2023	ES2303695	5.63	0.46	0.05	6.26	6.09	6.22	-	-	<0.02	<0.02	-	0.04	-
Flatrock Creek	Pathway	0021_MW164	0021_MW164_241022	22 Oct 2024	ES2435078	2.61	0.29	0.01	3.17	2.90	2.93	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0021_MW164	0021_MW164_250402	02 Apr 2025	ES2510113	2.86	0.26	<0.01	3.41	3.12	3.12	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0021_MW164	0021_MW164_251021	21 Oct 2025	ES2533521	2.34	0.27	<0.01	2.89	2.61	2.63	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0021_SW020	DC_SW05	13 Apr 2017	ES1709064	0.297	0.368	0.0153	0.812	0.665	0.759	-	-	0.0277	0.0006	-	0.0141	-
Flatrock Creek	Pathway	0021_SW020	0021_SW020_211020	20 Oct 2021	ES2138639	0.14	0.32	<0.01	0.57	0.46	0.53	-	-	0.04	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0021_SW020	0021_SW020_220406	06 Apr 2022	ES2212442	0.02	0.03	<0.01	0.05	0.05	0.05	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0021_SW020	0021_SW020_220707	07 Jul 2022	ES2224473	0.07	0.12	<0.01	0.19	0.19	0.19	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0021_SW020	0021_SW020_221014	14 Oct 2022	ES2237106	0.44	0.46	0.02	1.08	0.90	1.04	-	-	0.02	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0021_SW020	0021_QC205_230203	03 Feb 2023	961542	0.45 ^{#1}	0.54 ^{#1}	<0.01	1.25	0.99	1.16	0.45	0.99	0.06	<0.01	<0.01	0.01	0.02
Flatrock Creek	Pathway	0021_SW020	0021_SW020_230203	03 Feb 2023	ES2303695	0.35	0.53	0.01	1.10	0.88	1.04	-	-	0.05	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0021_SW020	0021_SW020_230421	21 Apr 2023	ES2313364	0.62	0.66	0.02	1.59	1.28	1.50	-	-	0.05	<0.02	-	0.02	-
Flatrock Creek	Pathway	0021_SW020	0021_SW020_240412	12 Apr 2024	ES2412012	0.25	0.38	<0.01	0.74	0.63	0.70	-	-	0.04	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0021_SW020	0021_SW020_241022	22 Oct 2024	ES2435078	0.34	0.47	0.02	1.01	0.81	0.96	-	-	0.04	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0021_SW020	0021_SW020_250402	02 Apr 2025	ES2510622	0.09	0.16	<0.01	0.25	0.25	0.25	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0021_SW022	FC_SW06	19 Apr 2017	ES1709535	0.103	0.124	0.002	0.266	0.227	0.251	-	-	0.0088	<0.0005	-	0.0029	-
Flatrock Creek	Pathway	0021_SW022	0021_QC208_211020	20 Oct 2021	281322	0.28	0.65	0.02	1.2	0.93	-	0.30	-	0.05	<0.02	-	0.02	-
Flatrock Creek	Pathway	0021_SW022	0021_SW022_211020	20 Oct 2021	ES2138639	0.31	0.72	0.02	1.29	1.03	1.21	-	-	0.05	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0021_SW022	0021_SW022_220407	07 Apr 2022	ES2212442	0.07	0.08	<0.01	0.15	0.15	0.15	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0021_SW022	0021_SW022_221012	12 Oct 2022	ES2237106	0.39	0.36	0.02	0.89	0.75	0.87	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0021_SW022	0021_SW022_230419	19 Apr 2023	ES2313364	0.65	0.81	0.04	1.74	1.46	1.65	-	-	0.06	<0.02	-	0.03	-
Flatrock Creek	Pathway	0021_SW022	0021_SW022_231018	18 Oct 2023	ES2336399	0.43	0.33	0.01	0.82	0.76	0.80	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0021_SW022	0021_SW022_240410	10 Apr 2024	ES2412012	0.39	0.98	0.02	1.59	1.37	1.49	-	-	0.05	<0.02	-	0.02	-
Flatrock Creek	Pathway	0021_SW022	0021_SW022_241026	26 Oct 2024	ES2435541	0.25	0.16	<0.01	0.41	0.41	0.41	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0021_SW022	0021_SW022_250403	03 Apr 2025	ES2510622	0.16	0.23	<0.01	0.39	0.39	0.39	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0021_SW022	0021_SW022_251022	22 Oct 2025	ES2533521	0.28	0.44	0.02	0.87	0.72	0.84	-	-	0.03	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0021_SW025	FC_SW09	20 Apr 2017	ES1709644	0.0574	0.0236	<0.0005	0.0867	0.0810	0.0840	-	-	0.0011	<0.0005	-	0.0012	-
Flatrock Creek	Pathway	0021_SW025	0021_SW025_211026	26 Oct 2021	ES2138639	0.12	0.10	<0.01	0.22	0.22	0.22	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0021_SW025	0021_SW025_220407	07 Apr 2022	ES2212442	0.11	0.05	<0.01	0.16	0.16	0.16	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0021_SW025	0021_SW025_221013	13 Oct 2022	ES2237106	0.14	0.06	0.01	0.23	0.20	0.23	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0021_SW025	0021_SW025_230419	19 Apr 2023	ES2313364	0.16	0.06	<0.01	0.22	0.22	0.22	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0021_SW025	0021_SW025_240410	10 Apr 2024	ES2412012	0.07	0.10	<0.01	0.17	0.17	0.17	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Pathway	0021_SW025	0021_SW025_250404	04 Apr 2025	ES2510622	0.10	0.08	<0.01	0.18	0.18	0.18	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW026	FC_SW01	19 Apr 2017	ES1709535	0.0962	0.0921	0.0012	0.211	0.188	0.2	-	-	0.0065	<0.0005	-	0.0038	-
Flatrock Creek	Receptor	0020_SW026	FC_QC216_180515	15 May 2018	599245	0.01 ^{#1}	0.02 ^{#1}	<0.01	<0.1	0.03	<0.05	-	-	<0.01	<0.01	-	<0.01	-
Flatrock Creek	Receptor	0020_SW026	FC_SW01_180515	15 May 2018	ES1814324	0.0123	0.0293	<0.0005	0.0514	0.0416	0.0473	-	-	0.0025	<0.0005	-	0.0020	-
Flatrock Creek	Receptor	0020_SW026	0020_SW026_211019	19 Oct 2021	ES2138638	0.01	0.03	<0.01	0.04	0.04	0.04	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW026	0020_QC203_220404	04 Apr 2022	293030	<0.01	0.02	<0.01	0.02	0.02	-	<0.01	-	<0.01	<0.02	-	<0.01	-
Flatrock Creek	Receptor	0020_SW026	0020_SW026_220404	04 Apr 2022	ES2212597	0.07	0.06	<0.01	0.13	0.13	0.13	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW026	0020_QC103_220707	07 Jul 2022	ES2224472	0.04	0.04	<0.01	0.08	0.08	0.08	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW026	0020_QC203_220707	07 Jul 2022	905319	0.04 ^{#1}	0.04 ^{#1}	<0.01	<0.1	0.08	0.08	0.04	0.08	<0.01	<0.01	-	<0.01	<0.01
Flatrock Creek	Receptor	0020_SW026	0020_SW026_220707	07 Jul 2022	ES2224472	0.04	0.04	<0.01	0.08	0.08	0.08	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW026	0020_SW026_221010	10 Oct 2022	ES2237104	0.06	0.05	<0.01	0.11	0.11	0.11	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW026	0020_SW026_230130	30 Jan 2023	ES2303447	0.09	0.09	<0.01	0.20	0.18	0.20	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW026	0020_SW026_230417	17 Apr 2023	ES2313254	0.04	0.05	<0.01	0.09	0.09	0.09	-	-	<0.02	<0.02	-	<0.02	-



Appendix B
Table B5d
Historical Water Analytical Results - Flatrock Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids					
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Sum of US EPA PFAS (PFOS + PFOA)*	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)
EQL	0.0001	0.0005	0.0005	0.0003	0.0003	0.0003	0.01	0.01	0.0005	0.0005	0.01	0.0005	0.01	0.0005
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13		220											
PFAS NEMP 3.0 2025 Recreational water quality	2	2	10		2									

Catchment	SPR	Location	Field ID	Date	Lab Report No.													
Flatrock Creek	Receptor	0020_SW026	0020_SW026_231016	16 Oct 2023	ES2336397	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW026	0020_SW026_240408	08 Apr 2024	ES2411964	0.08	0.06	<0.01	0.14	0.14	0.14	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW026	0020_QC112_241025	25 Oct 2024	ES2435539	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW026	0020_QC212_241025	25 Oct 2024	1156671	0.03	<0.01	<0.01	<0.1	0.03	<0.05	0.03	0.03	<0.01	<0.01	<0.01	<0.01	<0.01
Flatrock Creek	Receptor	0020_SW026	0020_SW026_241025	25 Oct 2024	ES2435539	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW026	0020_QC251_250401	01 Apr 2025	1209674	<0.01	<0.01	<0.01	<0.1	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Flatrock Creek	Receptor	0020_SW026	0020_SW026_250401	01 Apr 2025	ES2510618	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW026	0020_QC120_251020	20 Oct 2025	ES2533546	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW026	0020_QC220_251020	20 Oct 2025	1285219	0.01 ^{#1}	<0.01	<0.01	<0.1	0.01	<0.05	-	-	<0.01	<0.01	<0.01	<0.01	<0.01
Flatrock Creek	Receptor	0020_SW026	0020_SW026_251020	20 Oct 2025	ES2533546	0.01	<0.01	<0.01	0.01	0.01	0.01	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW027	FC_SW02	19 Apr 2017	ES1709535	0.0667	0.0933	0.0012	0.185	0.16	0.173	-	-	0.0069	<0.0005	-	0.0044	-
Flatrock Creek	Receptor	0020_SW027	FC_SW02_180515	15 May 2018	ES1814324	0.0171	0.0396	<0.0005	0.0702	0.0567	0.0648	-	-	0.0031	<0.0005	-	0.0023	-
Flatrock Creek	Receptor	0020_SW027	0020_SW027_211019	19 Oct 2021	ES2138638	0.03	0.06	<0.01	0.09	0.09	0.09	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW027	0020_QC103_220404	04 Apr 2022	ES2212597	0.06	0.05	<0.01	0.11	0.11	0.11	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW027	0020_SW027_220404	04 Apr 2022	ES2212597	0.04	0.04	<0.01	0.08	0.08	0.08	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW027	0020_SW027_220707	07 Jul 2022	ES2224472	0.05	0.04	<0.01	0.09	0.09	0.09	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW027	0020_SW027_221010	10 Oct 2022	ES2237104	0.04	0.06	<0.01	0.10	0.10	0.10	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW027	0020_SW027_230130	30 Jan 2023	ES2303447	0.11	0.12	<0.01	0.26	0.23	0.26	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW027	0020_SW027_230417	17 Apr 2023	ES2313254	0.13	0.14	<0.01	0.29	0.27	0.29	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW027	0020_SW027_231016	16 Oct 2023	ES2336397	0.01	<0.01	<0.01	0.01	0.01	0.01	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW027	0020_SW027_240408	08 Apr 2024	ES2411964	0.06	0.07	<0.01	0.13	0.13	0.13	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW027	0020_SW027_241025	25 Oct 2024	ES2435539	0.06	0.05	<0.01	0.11	0.11	0.11	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW027	0020_QC250_250401	01 Apr 2025	1209674	0.06	0.05	<0.01	0.11	0.11	0.11	0.06	0.11	<0.01	<0.01	<0.01	<0.01	<0.01
Flatrock Creek	Receptor	0020_SW027	0020_SW027_250401	01 Apr 2025	ES2510618	0.04	0.04	<0.01	0.08	0.08	0.08	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW027	0020_SW027_251020	20 Oct 2025	ES2533546	0.02	0.02	<0.01	0.04	0.04	0.04	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW029	FC_SW04	19 Apr 2017	ES1709535	0.0709	0.0774	0.001	0.171	0.148	0.16	-	-	0.0051	<0.0005	-	0.0039	-
Flatrock Creek	Receptor	0020_SW029	FC_SW04_180515	15 May 2018	ES1814324	0.0492	0.0954	0.0012	0.176	0.145	0.164	-	-	0.0078	<0.0005	-	0.0054	-
Flatrock Creek	Receptor	0020_SW029	0020_SW029_211018	18 Oct 2021	ES2138638	0.04	0.06	<0.01	0.10	0.10	0.10	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW029	0020_QC104_220404	04 Apr 2022	ES2212597	0.03	0.03	<0.01	0.06	0.06	0.06	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW029	0020_QC204_220404	04 Apr 2022	293030	0.03	0.03	<0.01	0.06	0.06	-	0.03	-	<0.01	<0.02	-	<0.01	-
Flatrock Creek	Receptor	0020_SW029	0020_SW029_220404	04 Apr 2022	ES2212597	0.03	0.03	<0.01	0.06	0.06	0.06	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW029	0020_SW029_221011	10 Oct 2022	ES2237104	0.06	0.05	<0.01	0.11	0.11	0.11	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW029	0020_SW029_230417	17 Apr 2023	ES2313254	0.05	0.05	<0.01	0.10	0.10	0.10	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW029	0020_SW029_231016	16 Oct 2023	ES2336397	0.04	0.04	<0.01	0.08	0.08	0.08	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW029	0020_SW029_240408	08 Apr 2024	ES2411964	0.06	0.06	<0.01	0.12	0.12	0.12	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW029	0020_QC151_241021	21 Oct 2024	ES2435143	0.02	0.02	<0.01	0.04	0.04	0.04	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW029	0020_SW029_241021	21 Oct 2024	ES2435143	0.02	0.02	<0.01	0.04	0.04	0.04	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW029	0020_SW029_250331	31 Mar 2025	ES2510618	0.04	0.04	<0.01	0.08	0.08	0.08	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW029	0020_SW029_251020	20 Oct 2025	ES2533546	0.03	0.03	<0.01	0.06	0.06	0.06	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW033	FC_SW14_180406	06 Apr 2018	ES1810551	0.0041	0.0056	<0.0005	0.0097	0.0097	0.0097	-	-	<0.0005	<0.0005	-	<0.0005	-
Flatrock Creek	Receptor	0020_SW033	FC_SW14_180515	15 May 2018	ES1814324	0.0084	0.0200	<0.0005	0.0349	0.0284	0.0319	-	-	0.0017	<0.0005	-	0.0014	-
Flatrock Creek	Receptor	0020_SW033	0020_SW033_211019	19 Oct 2021	ES2138638	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW033	0020_SW033_220404	04 Apr 2022	ES2212597	0.02	0.01	<0.01	0.03	0.03	0.03	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW033	0020_SW033_221010	10 Oct 2022	ES2237104	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW033	0020_SW033_230417	17 Apr 2023	ES2313254	0.07	0.01	<0.01	0.08	0.08	0.08	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW033	0020_SW033_231016	16 Oct 2023	ES2336397	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW033	0020_SW033_240408	08 Apr 2024	ES2411964	0.01	<0.01	<0.01	0.01	0.01	0.01	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW033	0020_SW033_241025	25 Oct 2024	ES2435539	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW033	0020_SW033_250401	01 Apr 2025	ES2510618	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Flatrock Creek	Receptor	0020_SW033	0020_SW033_251020	20 Oct 2025	ES2533546	0.01	<0.01	<0.01	0.01	0.01	0.01	-	-	<0.02	<0.02	-	<0.02	-



	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids					
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Sum of US EPA PFAS (PFOS + PFOA)*	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPPS)	Perfluoropentane sulfonic acid (PFPeS)
EQL	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
	0.0001	0.0005	0.0005	0.0003	0.0003	0.0003	0.01	0.01	0.0005	0.0005	0.01	0.0005	0.01	0.0005
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13		220											
PFAS NEMP 3.0 2025 Recreational water quality	2	2	10		2									

Statistics														
Number of Results	356	356	356	356	356	341	34	19	356	356	20	356	23	356
Number of Detects	282	303	142	303	309	292	23	13	133	2	1	109	4	149
Minimum Concentration	0.0008	0.0028	<0.0005	0.0041	0.0041	0.0041	0.01	<0.01	<0.0005	<0.0005	0.01	0.0005	0.01	<0.0005
Minimum Detect	0.0008	0.0028	0.0009	0.0041	0.0041	0.0041	0.01	0.02	0.0009	0.0006	0.01	0.0005	0.01	0.001
Maximum Concentration	9.73	12.2	0.87	34.5	15.4	31.4	5.96	8.6	1.51	<0.02	0.01	0.93	0.35	1.8
Maximum Detect	9.73	12.2	0.87	34.5	15.4	31.4	5.96	8.6	1.51	0.0078	0.01	0.93	0.35	1.8
Average Concentration *	0.56	0.54	0.037	1.7	1.1	1.6	0.46	1	0.057	0.0087	0.0053	0.036	0.022	0.065
Geometric Average *	0.081	0.095	0.009	0.22	0.18	0.21	0.055	0.082	0.015	0.0066	0.0052	0.012	0.0072	0.016
Median Concentration *	0.07	0.0977	0.005	0.1985	0.19	0.19	0.045	0.08	0.01	0.01	0.005	0.01	0.005	0.01
Standard Deviation *	1.3	1.6	0.12	4.5	2.4	4.2	1.1	2.4	0.2	0.0031	0.0011	0.1	0.072	0.23
Geometric Standard Deviation *	8.9	6.7	4.2	9.2	8.7	9.1	8.8	13	3.4	3	1.2	3.5	2.7	3.5
95% UCL (Student's-t) *	0.67	0.683	0.0471	2.057	1.314	1.962	0.794	1.992	0.0744	0.00894	0.00568	0.0454	0.0481	0.0843
Number of Env Standard Exceedances	146	15	0	0	36	0	0	0	0	0	0	0	0	0
Number of Env Standard Exceedances (Detects Only)	146	15	0	0	36	0	0	0	0	0	0	0	0	0
% of Detects	79	85	40	85	87	86	68	68	37	1	5	31	17	42
% of Non-Detects	21	15	60	15	13	14	32	32	63	99	95	69	83	58
% of Detects at or above Env Standards	41	4	0	0	10	0	0	0	0	0	0	0	0	0
% of Results Below Env Standards or Non-Detect	59	96	100	100	90	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.
- #2 Reported Analyte LOR is higher than Requested Analyte LOR



Appendix B
Table B5d
Historical Water Analytical Results - Flatrock Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Carboxylic Acids												
	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluorohexanoic acid (PFHxA)	Perfluorooctanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnDA)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EFOSAA)	
	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	0.002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.001	0.0005	
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%													
PFAS NEMP 3.0 2025 Recreational water quality													

Catchment	SPR	Location	Field ID	Date	Lab Report No.												
Flatrock Creek	Source	0020_MW037	MW037	01 May 2017	ES1710866	-	0.002	<0.0005	<0.0005	0.0224	0.163	<0.0005	0.0424	<0.0005	<0.0005	<0.0005	<0.001
Flatrock Creek	Source	0020_MW037	0020_MW037_211018	18 Oct 2021	ES2138638	-	0.6	<0.02	<0.02	0.38	2.60	<0.02	1.40	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0020_MW037	0020_MW037_220404	04 Apr 2022	ES2212597	-	0.2	<0.02	<0.02	0.21	1.54	<0.02	0.95	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0020_MW037	0020_MW037_221010	10 Oct 2022	ES2237104	-	0.6	<0.02	<0.02	0.47	2.76	<0.02	1.73	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0020_MW037	0020_MW037_230417	17 Apr 2023	ES2313254	-	0.6	<0.02	<0.02	0.37	2.35	<0.02	1.87	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0020_MW037	0020_MW037_231016	16 Oct 2023	ES2336397	-	0.6	<0.02	<0.02	0.45	2.54	<0.02	1.78	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0020_MW037	0020_SW037_231016	16 Oct 2023	ES2336397	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0020_MW037	0020_MW037_240408	08 Apr 2024	ES2411964	-	0.8	<0.02	<0.02	0.66	3.36	<0.02	2.49	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0020_MW037	0020_MW037_241022	22 Oct 2024	ES2435143	-	0.7	<0.02	<0.02	0.71	3.85	<0.02	2.84	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0020_MW037	0020_MW037_250331	31 Mar 2025	ES2510618	-	0.4	<0.02	<0.02	0.32	2.09	<0.02	1.21	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0020_MW037	0020_QC131_250331	31 Mar 2025	ES2510618	-	0.4	<0.02	<0.02	0.31	1.83	<0.02	1.17	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0020_MW037	0020_QC231_250331	31 Mar 2025	1209674	-	0.47	<0.01	<0.01	0.30	1.9	<0.01	1.3	<0.01	<0.01	<0.01	<0.05
Flatrock Creek	Source	0020_MW037	0020_MW037_251020	20 Oct 2025	ES2533546	-	0.7	<0.02	<0.02	0.51	3.42	<0.02	2.35	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0020_MW112	F_MW02	01 May 2017	ES1710866	-	<0.002	<0.0005	<0.0005	0.0022	0.0084	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
Flatrock Creek	Source	0020_MW112	0020_MW112_211018	18 Oct 2021	ES2138638	-	<0.1	<0.02	<0.02	0.02	0.08	<0.02	0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0020_MW112	0020_MW112_220404	04 Apr 2022	ES2212597	-	<0.1	<0.02	<0.02	0.05	0.23	<0.02	0.07	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0020_MW112	0020_MW112_221010	10 Oct 2022	ES2237104	-	<0.1	<0.02	<0.02	0.04	0.16	<0.02	0.08	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0020_MW112	0020_MW112_230417	17 Apr 2023	ES2313254	-	0.1	<0.02	<0.02	0.09	0.39	<0.02	0.14	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0020_MW112	0020_MW112_231016	16 Oct 2023	ES2336397	-	<0.1	<0.02	<0.02	0.07	0.35	<0.02	0.12	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0020_MW112	0020_MW112_240408	08 Apr 2024	ES2411964	-	<0.1	<0.02	<0.02	0.04	0.14	<0.02	0.04	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0020_MW112	0020_MW112_241021	21 Oct 2024	ES2435143	-	<0.1	<0.02	<0.02	0.08	0.33	<0.02	0.14	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0020_MW112	0020_QC251_241021	21 Oct 2024	1154740	-	0.09	<0.01	<0.01	0.06	0.28	<0.01	0.10	<0.01	<0.01	<0.01	<0.05
Flatrock Creek	Source	0020_MW112	0020_MW112_250331	31 Mar 2025	ES2510618	-	<0.1	<0.02	<0.02	0.04	0.10	<0.02	0.04	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0020_MW112	0020_QC130_250331	31 Mar 2025	ES2510618	-	<0.1	<0.02	<0.02	0.03	0.09	<0.02	0.04	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0020_MW112	0020_QC230_250331	31 Mar 2025	1209674	-	<0.05	<0.01	<0.01	0.03	0.11	<0.01	0.06	<0.01	<0.01	<0.01	<0.05
Flatrock Creek	Source	0020_MW112	0020_MW112_251020	20 Oct 2025	ES2533546	-	<0.1	<0.02	<0.02	0.07	0.33	<0.02	0.12	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0020_SW016	E_Irrigation_03	26 Oct 2017	ES1726858	-	<0.002	<0.0005	<0.0005	0.0050	0.0037	<0.0005	0.0026	<0.0005	<0.0005	<0.0005	<0.001
Flatrock Creek	Source	0020_SW016	TNQA301	26 Oct 2017	569797	-	<0.005	<0.001	<0.001	0.006	0.016 ^{#1}	<0.001	0.004	<0.001	<0.001	<0.001	<0.005
Flatrock Creek	Source	0020_SW016	0020_SW016_211018	18 Oct 2021	ES2138638	-	<0.1	<0.02	<0.02	<0.02	0.07	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0020_SW016	0020_SW016_220408	08 Apr 2022	ES2212597	-	<0.1	<0.02	<0.02	<0.02	0.09	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0020_SW016	0020_SW016_221011	11 Oct 2022	ES2237104	-	<0.1	<0.02	<0.02	<0.02	0.06	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0020_SW016	0020_SW016_230417	17 Apr 2023	ES2313254	-	<0.1	<0.02	<0.02	<0.02	0.07	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0020_SW016	0020_SW016_231016	16 Oct 2023	ES2336397	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0020_SW016	0020_SW016_240408	08 Apr 2024	ES2411964	-	<0.1	<0.02	<0.02	<0.02	0.05	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0020_SW016	0020_SW016_241021	21 Oct 2024	ES2435143	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0020_SW016	0020_SW016_250331	31 Mar 2025	ES2510618	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0020_SW016	0020_SW016_251020	20 Oct 2025	ES2533546	-	<0.1	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0021_MW026	MW026	28 Apr 2017	ES1710200	-	<0.002	<0.0005	<0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
Flatrock Creek	Source	0021_MW026	0021_MW026_190214	14 Feb 2019	ES1905115	-	<0.002	<0.0005	<0.0005	<0.0005	0.0011	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
Flatrock Creek	Source	0021_MW026	0021_QC110_190214	14 Feb 2019	ES1905115	-	<0.002	<0.0005	<0.0005	<0.0005	0.0011	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
Flatrock Creek	Source	0021_MW026	0021_MW026_190529	29 May 2019	ES1916831	-	<0.002	<0.0005	<0.0005	<0.0005	0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
Flatrock Creek	Source	0021_MW026	0021_MW026_211020	20 Oct 2021	ES2138639	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0021_MW026	0021_MW026_220406	06 Apr 2022	ES2212442	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0021_MW026	0021_MW026_221014	14 Oct 2022	ES2237106	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0021_MW026	0021_MW026_230421	21 Apr 2023	ES2313364	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0021_MW026	0021_MW026_231019	19 Oct 2023	ES2336398	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0021_MW026	0021_MW026_240412	12 Apr 2024	ES2411994	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0021_MW026	0021_MW026_241022	22 Oct 2024	ES2435078	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0021_MW026	0021_QC104_241022	22 Oct 2024	ES2435078	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0021_MW026	0021_QC204_241022	22 Oct 2024	1154751	-	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05
Flatrock Creek	Source	0021_MW026	0021_MW026_250407	07 Apr 2025	ES2510113	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05



Appendix B
Table B5d
Historical Water Analytical Results - Flatrock Creek

	PFAS - Perfluoroalkyl Carboxylic Acids													
	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluorohexanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnDA)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EFOSAA)	
	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	0.002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.001	0.0005	
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%														
PFAS NEMP 3.0 2025 Recreational water quality														

Catchment	SPR	Location	Field ID	Date	Lab Report No.												
Flatrock Creek	Source	0021_MW026	0021_MW026_251021	21 Oct 2025	ES2533521	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0021_MW117	C_MW01	03 May 2017	ES1710866	-	<0.002	<0.0005	<0.0005	0.0026	0.0263	<0.0005	0.0104	<0.0005	<0.0005	<0.0005	<0.001
Flatrock Creek	Source	0021_MW117	0021_MW117_211020	20 Oct 2021	ES2138639	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0021_MW117	0021_QC203_211020	20 Oct 2021	281322	-	<0.02	<0.02	<0.05	<0.01	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02	<0.1
Flatrock Creek	Source	0021_MW117	0021_MW117_221014	14 Oct 2022	ES2237106	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0021_MW117	0021_MW117_230421	21 Apr 2023	ES2313364	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0021_MW117	0021_MW117_231019	19 Oct 2023	ES2336398	-	<0.1	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0021_MW117	0021_MW117_240412	12 Apr 2024	ES2411994	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0021_MW117	0021_MW117_241022	22 Oct 2024	ES2435078	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0021_MW117	0021_MW117_250402	02 Apr 2025	ES2510113	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0021_MW117	0021_MW117_251021	21 Oct 2025	ES2533521	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0021_MW118	C_MW02	03 May 2017	ES1710866	-	<0.002	<0.0005	<0.0005	<0.0005	0.0037	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
Flatrock Creek	Source	0021_MW118	0021_MW118_211026	26 Oct 2021	ES2138639	-	<0.1	<0.02	<0.02	<0.02	0.10	<0.02	0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0021_MW118	0021_MW118_221011	11 Oct 2022	ES2237106	-	<0.1	<0.02	<0.02	<0.02	0.07	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0021_MW118	0021_MW118_230203	03 Feb 2023	ES2303695	-	<0.1	<0.02	<0.02	<0.02	0.06	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0021_MW118	0021_MW118_230421	21 Apr 2023	ES2313364	-	<0.1	<0.02	<0.02	<0.02	0.08	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0021_MW118	0021_MW118_231019	19 Oct 2023	ES2336398	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0021_MW118	0021_MW118_240412	12 Apr 2024	ES2411994	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0021_MW118	0021_MW118_241022	22 Oct 2024	ES2435078	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0021_MW118	0021_MW118_250402	02 Apr 2025	ES2510113	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0021_MW118	0021_MW118_251021	21 Oct 2025	ES2533521	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0021_MW118	0021_QC140_251021	21 Oct 2025	ES2533538	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Source	0021_MW118	0021_QC240_251021	21 Oct 2025	1285374	-	<0.05	<0.01	<0.01	<0.01	0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05
Flatrock Creek	Pathway	0020_MW001	MW001	08 May 2017	ES1711220	-	<0.002	<0.0005	<0.0005	<0.0005	0.0019	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	<0.001
Flatrock Creek	Pathway	0020_MW001	0020_MW001_220412	12 Apr 2022	ES2213152	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW001	0020_MW001_221010	10 Oct 2022	ES2236866	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW001	0020_MW001_230131	31 Jan 2023	ES2303447	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW001	0020_QC201_230131	31 Jan 2023	961653	-	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05
Flatrock Creek	Pathway	0020_MW001	0020_MW001_250407	07 Apr 2025	ES2510618	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW001	0020_MW001_251023	23 Oct 2025	ES2533546	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW007	0020_MW007_180411	11 Apr 2018	ES1810721	-	<0.002	<0.0005	<0.0005	0.0069	0.0156	0.0013	0.0083	<0.0005	<0.0005	<0.0005	<0.001
Flatrock Creek	Pathway	0020_MW007	0020_MW007_211015	15 Oct 2021	ES2138638	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW007	0020_QC100_211015	15 Oct 2021	ES2138638	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW007	0020_MW007_220404	04 Apr 2022	ES2212597	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW007	0020_MW007_221010	10 Oct 2022	ES2237104	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW007	0020_MW007_230131	31 Jan 2023	ES2303447	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW007	0020_MW007_230417	17 Apr 2023	ES2313254	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW007	0020_MW007_231016	16 Oct 2023	ES2336397	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW007	0020_MW007_240408	08 Apr 2024	ES2411964	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW007	0020_MW007_250407	07 Apr 2025	ES2510618	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW007	0020_MW007_251023	23 Oct 2025	ES2533546	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW007	0020_QC105_251023	23 Oct 2025	ES2533546	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW007	0020_QC205_251023	23 Oct 2025	1285219	-	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05
Flatrock Creek	Pathway	0020_MW017	MW017	01 May 2017	ES1710866	-	<0.002	<0.0005	<0.0005	0.0166	0.0621	0.0012	0.0144	<0.0005	<0.0005	<0.0005	<0.001
Flatrock Creek	Pathway	0020_MW017	0020_MW017_211015	15 Oct 2021	ES2138638	-	<0.1	<0.02	<0.02	<0.02	0.07	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW017	0020_MW017_220404	04 Apr 2022	ES2212597	-	<0.1	<0.02	<0.02	<0.02	0.09	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW017	0020_MW017_221011	11 Oct 2022	ES2237104	-	<0.1	<0.02	<0.02	0.02	0.05	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW017	0020_MW017_230201	01 Feb 2023	ES2303447	-	<0.1	<0.02	<0.02	0.03	0.10	<0.02	0.04	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW017	0020_MW017_230417	17 Apr 2023	ES2313254	-	<0.1	<0.02	<0.02	0.04	0.11	<0.02	0.04	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW017	0020_QC104_230417	17 Apr 2023	ES2313254	-	<0.1	<0.02	<0.02	0.03	0.08	<0.02	0.03	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW017	0020_QC204_230417	17 Apr 2023	321518	-	<0.02	<0.02	<0.05	0.02	0.09	<0.01	0.04	<0.5	<0.1	<0.02	<0.1



Appendix B
Table B5d
Historical Water Analytical Results - Flatrock Creek

	PFAS - Perfluoroalkyl Carboxylic Acids													
	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluorohexanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTriDA)	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	
EQL	0.01	0.002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.001	0.0005	
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%														
PFAS NEMP 3.0 2025 Recreational water quality														

Catchment	SPR	Location	Field ID	Date	Lab Report No.												
Flatrock Creek	Pathway	0020_MW017	0020_MW017_231016	16 Oct 2023	ES2336397	-	<0.1	<0.02	<0.02	0.02	0.07	<0.02	0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW017	0020_MW017_240408	08 Apr 2024	ES2411964	-	<0.1	<0.02	<0.02	0.02	0.05	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW017	0020_MW017_241021	21 Oct 2024	ES2435143	-	<0.1	<0.02	<0.02	0.03	0.07	<0.02	0.03	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW017	0020_MW017_250331	31 Mar 2025	ES2510618	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW017	0020_MW017_251020	20 Oct 2025	ES2533546	-	<0.1	<0.02	<0.02	<0.02	0.05	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW068	0020_MW068_221010	10 Oct 2022	ES2236866	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW068	0020_MW068_230131	31 Jan 2023	ES2303447	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW068	0020_MW068_241021	21 Oct 2024	ES2435143	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW068	0020_MW068_250401	01 Apr 2025	ES2510618	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW068	0020_MW068_251020	20 Oct 2025	ES2533546	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW069	0020_MW069_250424	24 Apr 2025	ES2512752	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW069	0020_MW069_251020	20 Oct 2025	ES2533546	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW109	E_MW04	01 May 2017	ES1710866	-	<0.002	<0.0005	<0.0005	0.0021	0.0192	<0.0005	0.0037	<0.0005	<0.0005	<0.0005	<0.001
Flatrock Creek	Pathway	0020_MW109	E_MW04_180503	03 May 2018	ES1812871	-	<0.1	<0.02	<0.02	0.02	0.18	<0.02	0.03	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW109	0020_MW109_211015	15 Oct 2021	ES2138638	-	<0.1	<0.02	<0.02	<0.02	0.06	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW109	0020_MW109_220404	04 Apr 2022	ES2212597	-	<0.1	<0.02	<0.02	<0.02	0.12	<0.02	0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW109	0020_QC100_220404	04 Apr 2022	ES2212597	-	<0.1	<0.02	<0.02	<0.02	0.12	<0.02	0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW109	0020_QC200_220404	04 Apr 2022	293030	-	0.03	<0.02	<0.05	0.01	0.11	<0.01	0.02	<0.5	<0.1	<0.02	<0.1
Flatrock Creek	Pathway	0020_MW109	0020_MW109_221011	11 Oct 2022	ES2237104	-	<0.1	<0.02	<0.02	<0.02	0.14	<0.02	0.04	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW109	0020_MW109_230131	31 Jan 2023	ES2303447	-	<0.1	<0.02	<0.02	0.03	0.15	<0.02	0.07	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW109	0020_QC101_230131	31 Jan 2023	ES2303447	-	<0.1	<0.02	<0.02	0.03	0.15	<0.02	0.07	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW109	0020_MW109_230417	17 Apr 2023	ES2313254	-	<0.1	<0.02	<0.02	0.04	0.17	<0.02	0.05	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW109	0020_MW109_231016	16 Oct 2023	ES2336397	-	<0.1	<0.02	<0.02	0.02	0.14	<0.02	0.05	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW109	0020_MW109_240408	08 Apr 2024	ES2411964	-	<0.1	<0.02	<0.02	<0.02	0.06	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW109	0020_QC100_240408	08 Apr 2024	ES2411964	-	<0.1	<0.02	<0.02	0.03	0.16	<0.02	0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW109	0020_QC200_240408	08 Apr 2024	348827	-	0.05	<0.02	<0.05	0.02	0.14	<0.01	0.05	<0.5	<0.1	<0.02	<0.1
Flatrock Creek	Pathway	0020_MW109	0020_MW109_241021	21 Oct 2024	ES2435143	-	<0.1	<0.02	<0.02	0.02	0.11	<0.02	0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW109	0020_MW109_250331	31 Mar 2025	ES2510618	-	<0.1	<0.02	<0.02	<0.02	0.12	<0.02	0.04	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW109	0020_MW109_251020	20 Oct 2025	ES2533546	-	<0.1	<0.02	<0.02	<0.02	0.06	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW109	0020_QC140_251020	20 Oct 2025	ES2533546	-	<0.1	<0.02	<0.02	<0.02	0.06	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW109	0020_QC240_251020	20 Oct 2025	1285219	-	<0.05	<0.01	<0.01	0.01 ^{#1}	0.05	<0.01	0.02	<0.01	<0.01	<0.01	<0.05
Flatrock Creek	Pathway	0020_MW110	E_MW05	01 May 2017	ES1710866	-	<0.002	<0.0005	<0.0005	0.0089	0.0409	<0.0005	0.0251	<0.0005	<0.0005	<0.0005	<0.001
Flatrock Creek	Pathway	0020_MW110	0020_MW110_211015	15 Oct 2021	ES2138638	-	0.1	<0.02	<0.02	0.08	0.45	<0.02	0.16	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW110	0020_MW110_220404	04 Apr 2022	ES2212597	-	0.2	<0.02	<0.02	0.07	0.61	<0.02	0.40	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW110	0020_QC102_220404	04 Apr 2022	ES2212597	-	0.2	<0.02	<0.02	0.07	0.59	<0.02	0.38	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW110	0020_QC202_220404	04 Apr 2022	293030	-	0.28	<0.02	<0.05	0.08	0.56	<0.01	0.42	<0.5	<0.1	<0.02	<0.1
Flatrock Creek	Pathway	0020_MW110	0020_MW110_221011	11 Oct 2022	ES2237104	-	0.3	<0.02	<0.02	0.11	0.22	<0.02	0.69	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW110	0020_MW110_230131	31 Jan 2023	ES2303447	-	0.3	<0.02	<0.02	0.10	0.18	<0.02	0.77	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW110	0020_MW110_230417	17 Apr 2023	ES2313254	-	0.2	<0.02	<0.02	0.10	0.16	<0.02	0.48	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW110	0020_MW110_231016	16 Oct 2023	ES2336397	-	<0.1	<0.02	<0.02	0.05	0.08	<0.02	0.16	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW110	0020_MW110_240408	08 Apr 2024	ES2411964	-	<0.1	<0.02	<0.02	0.06	0.11	<0.02	0.20	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW110	0020_MW110_241021	21 Oct 2024	ES2435143	-	0.2	<0.02	<0.02	0.04	0.07	<0.02	0.33	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW110	0020_QC250_241021	21 Oct 2024	1154740	-	0.18	<0.01	<0.01	0.04	0.08	<0.01	0.36	<0.01	<0.01	<0.01	<0.05
Flatrock Creek	Pathway	0020_MW110	0020_MW110_250331	31 Mar 2025	ES2510618	-	<0.1	<0.02	<0.02	0.03	0.06	<0.02	0.10	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_MW110	0020_MW110_251020	20 Oct 2025	ES2533546	-	0.3	<0.02	<0.02	0.06	0.10	<0.02	0.58	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_SW023	F_SW02	10 Apr 2017	ES1708884	-	<0.002	0.0081	0.0015	0.0547	0.156	0.0079	0.134	<0.0005	<0.0005	0.0027	<0.001
Flatrock Creek	Pathway	0020_SW023	0020_SW023_211019	19 Oct 2021	ES2138638	-	<0.1	<0.02	<0.02	<0.02	0.05	<0.02	0.04	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_SW023	0020_SW023_211213	13 Dec 2021	ES2145964	-	<0.1	<0.02	<0.02	0.03	0.18	<0.02	0.08	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_SW023	0020_SW023_220404	04 Apr 2022	ES2212597	-	0.1	<0.02	<0.02	0.07	0.43	<0.02	0.24	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_SW023	0020_SW023_220708	08 Jul 2022	ES2224472	-	<0.1	<0.02	<0.02	0.05	0.30	<0.02	0.18	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_SW023	0020_SW023_221010	10 Oct 2022	ES2237104	-	<0.1	<0.02	<0.02	0.03	0.12	<0.02	0.08	<0.05	<0.02	<0.02	<0.05



Appendix B
Table B5d
Historical Water Analytical Results - Flatrock Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Carboxylic Acids											N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Ethyl perfluorooctane sulfonamidacetic acid (EtFOSAA)
	Perfluoronanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluorohexanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnDA)		
	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	0.002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.001	0.0005
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%													
PFAS NEMP 3.0 2025 Recreational water quality													

Catchment	SPR	Location	Field ID	Date	Lab Report No.												
Flatrock Creek	Pathway	0020_SW023	0020_SW023_230417	17 Apr 2023	ES2313254	-	<0.1	<0.02	<0.02	0.02	0.07	<0.02	0.08	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_SW023	0020_SW023_240408	08 Apr 2024	ES2411964	-	<0.1	<0.02	<0.02	0.05	0.16	<0.02	0.16	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_SW023	0020_SW023_250331	31 Mar 2025	ES2510618	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	0.03	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_SW030	FC_SW05	20 Apr 2017	ES1709644	-	<0.002	<0.0005	<0.0005	<0.0005	0.0034	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
Flatrock Creek	Pathway	0020_SW030	FC_QC113_180430	30 Apr 2018	ES1812871	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_SW030	FC_SW05_180430	30 Apr 2018	ES1812871	-	<0.002	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}	0.0054	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.0050 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.005 ^{#2}
Flatrock Creek	Pathway	0020_SW030	0020_QC204_211019	19 Oct 2021	281319	-	<0.02	<0.02	<0.05	<0.01	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02	<0.1
Flatrock Creek	Pathway	0020_SW030	0020_SW030_211019	19 Oct 2021	ES2138638	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_SW030	0020_SW030_220404	04 Apr 2022	ES2212597	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_SW030	0020_SW030_220412	12 Apr 2022	ES2213152	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_SW030	0020_QC104_220708	08 Jul 2022	ES2224472	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_SW030	0020_QC204_220708	08 Jul 2022	905319	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05
Flatrock Creek	Pathway	0020_SW030	0020_SW030_220708	08 Jul 2022	ES2224472	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_SW030	0020_SW030_221012	12 Oct 2022	ES2236866	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_SW030	0020_SW030_221012	12 Oct 2022	ES2237104	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_SW030	0020_SW030_230201	01 Feb 2023	ES2303447	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_SW030	0020_QC101_230417	17 Apr 2023	ES2313254	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_SW030	0020_QC201_230417	17 Apr 2023	321518	-	<0.02	<0.02	<0.05	<0.01	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02	<0.1
Flatrock Creek	Pathway	0020_SW030	0020_SW030_230417	17 Apr 2023	ES2313254	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_SW030	0020_SW030_231016	16 Oct 2023	ES2336397	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_SW030	0020_SW030_240408	08 Apr 2024	ES2411964	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_SW030	0020_SW030_241026	26 Oct 2024	ES2435539	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_SW030	0020_SW030_250331	31 Mar 2025	ES2510618	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_SW030	0020_SW030_251022	22 Oct 2025	ES2533546	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_SW054	0020_SW054_220412	12 Apr 2022	ES2213152	-	<0.1	<0.02	<0.02	0.03	0.16	<0.02	0.05	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_SW054	0020_SW054_220707	07 Jul 2022	ES2224472	-	<0.1	<0.02	<0.02	<0.02	0.10	<0.02	0.03	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_SW054	0020_QC126_221012	12 Oct 2022	ES2236866	-	<0.1	<0.02	<0.02	0.02	0.14	<0.02	0.04	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_SW054	0020_SW054_221012	12 Oct 2022	ES2236866	-	<0.1	<0.02	<0.02	0.02	0.15	<0.02	0.05	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_SW054	0020_QC220_230130	30 Jan 2023	961653	-	<0.05	<0.01	<0.01	0.02 ^{#1}	0.14 ^{#1}	<0.01	0.06 ^{#1}	<0.01	<0.01	<0.01	<0.05
Flatrock Creek	Pathway	0020_SW054	0020_SW054_230130	30 Jan 2023	ES2303447	-	<0.1	<0.02	<0.02	<0.02	0.13	<0.02	0.05	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_SW054	0020_SW054_241021	21 Oct 2024	ES2435143	-	<0.1	<0.02	<0.02	0.03	0.16	<0.02	0.05	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0020_SW054	0020_SW054_251020	20 Oct 2025	ES2533546	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW125	FC_MW01	04 May 2017	ES1711220	-	<0.002	<0.0005	<0.0005	0.0009	0.0065	<0.0005	0.0019	<0.0005	<0.0005	<0.0005	<0.001
Flatrock Creek	Pathway	0021_MW125	FC_MW01_180503	03 May 2018	ES1812871	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW125	FC_MW01_190214	14 Feb 2019	ES1905115	-	<0.002	<0.0005	<0.0005	0.0009	0.0098	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
Flatrock Creek	Pathway	0021_MW125	FC_MW01_190529	29 May 2019	ES1916831	-	<0.002	<0.0005	<0.0005	0.0012	0.0149	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
Flatrock Creek	Pathway	0021_MW125	0021_MW125_211020	20 Oct 2021	ES2138639	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW125	0021_QC207_211020	20 Oct 2021	281322	-	<0.02	<0.02	<0.05	<0.01	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02	<0.1
Flatrock Creek	Pathway	0021_MW125	0021_MW125_220407	07 Apr 2022	ES2212442	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW125	0021_MW125_221014	14 Oct 2022	ES2237106	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW125	0021_MW125_230202	02 Feb 2023	ES2303446	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW125	0021_QC203_230202	02 Feb 2023	961655	-	<0.05	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05
Flatrock Creek	Pathway	0021_MW125	0021_MW125_230419	19 Apr 2023	ES2313364	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW125	0021_QC104_230419	19 Apr 2023	ES2313364	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW125	0021_QC204_230419	19 Apr 2023	321517	-	<0.02	<0.02	<0.05	<0.01	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02	<0.1
Flatrock Creek	Pathway	0021_MW125	0021_MW125_231018	18 Oct 2023	ES2336398	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW125	0021_MW125_240410	10 Apr 2024	ES2411994	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW125	0021_MW125_241026	26 Oct 2024	ES2435541	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW125	0021_MW125_251022	22 Oct 2025	ES2533521	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW126	FC_MW02	04 May 2017	ES1711220	-	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
Flatrock Creek	Pathway	0021_MW126	0021_MW126_211020	20 Oct 2021	ES2138639	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05



Appendix B
Table B5d
Historical Water Analytical Results - Flatrock Creek

	PFAS - Perfluoroalkyl Carboxylic Acids												N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Ethyl perfluorooctane sulfonamidacetic acid (EtFOSAA)
	Perfluoronanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluorohexanoic acid (PFHxA)	Perfluorooctanoic acid (PFOnA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnDA)				
	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	0.002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005			0.001	0.0005
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%														
PFAS NEMP 3.0 2025 Recreational water quality														

Catchment	SPR	Location	Field ID	Date	Lab Report No.												
Flatrock Creek	Pathway	0021_MW126	0021_QC108_211020	20 Oct 2021	ES2138639	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW126	0021_MW126_220407	07 Apr 2022	ES2212442	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW126	0021_QC209_220407	07 Apr 2022	293031	-	<0.02	<0.02	<0.05	<0.01	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02	<0.1
Flatrock Creek	Pathway	0021_MW126	0021_MW126_221013	13 Oct 2022	ES2237106	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW126	0021_MW126_230202	02 Feb 2023	ES2303446	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW126	0021_MW126_230419	19 Apr 2023	ES2313364	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW126	0021_MW126_231018	18 Oct 2023	ES2336398	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW126	0021_QC105_231018	18 Oct 2023	ES2336399	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW126	0021_QC205_231018	18 Oct 2023	335876	-	<0.02	<0.02	<0.05	<0.01	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02	<0.1
Flatrock Creek	Pathway	0021_MW126	0021_MW126_240410	10 Apr 2024	ES2411994	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW126	0021_MW126_241026	26 Oct 2024	ES2435541	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW126	0021_QC116_241026	26 Oct 2024	ES2435541	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW126	0021_QC216_241026	26 Oct 2024	1156160	-	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05
Flatrock Creek	Pathway	0021_MW126	0021_MW126_250401	01 Apr 2025	ES2510113	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW126	0021_QC105_250401	01 Apr 2025	ES2510113	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW126	0021_QC205_250401	01 Apr 2025	1210052	-	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05
Flatrock Creek	Pathway	0021_MW126	0021_MW126_251022	22 Oct 2025	ES2533521	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW128	LM_MW01	04 May 2017	ES1711220	-	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
Flatrock Creek	Pathway	0021_MW128	LM_MW01_180503	03 May 2018	ES1812871	-	<0.1	<0.02	<0.02	<0.02	0.13	<0.02	0.03	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW128	LM_MW01_190214	14 Feb 2019	ES1905115	-	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
Flatrock Creek	Pathway	0021_MW128	0021_QC100_190529	29 May 2019	ES1916831	-	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
Flatrock Creek	Pathway	0021_MW128	LM_MW01_190529	29 May 2019	ES1916831	-	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
Flatrock Creek	Pathway	0021_MW128	0021_MW128_211020	20 Oct 2021	ES2138639	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW128	0021_QC107_211020	20 Oct 2021	ES2138639	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW128	0021_MW128_211221	21 Dec 2021	ES2147061	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW128	0021_QC112_211221	21 Dec 2021	ES2147061	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW128	0021_QC212_211221	21 Dec 2021	853283	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05
Flatrock Creek	Pathway	0021_MW128	0021_MW128_220406	06 Apr 2022	ES2212442	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW128	0021_MW128_221014	14 Oct 2022	ES2237106	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW128	0021_MW128_230201	01 Feb 2023	ES2303446	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW128	0021_MW128_230419	19 Apr 2023	ES2313364	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW128	0021_MW128_231018	18 Oct 2023	ES2336398	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW128	0021_MW128_240410	10 Apr 2024	ES2411994	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW128	0021_QC104_240410	10 Apr 2024	ES2411994	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW128	0021_QC204_240410	10 Apr 2024	348825	-	<0.02	<0.02	<0.05	<0.01	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02	<0.1
Flatrock Creek	Pathway	0021_MW128	0021_MW128_241023	23 Oct 2024	ES2435078	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW128	0021_MW128_250402	02 Apr 2025	ES2510113	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW128	0021_QC155_250402	02 Apr 2025	ES2510113	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW128	0021_MW128_251021	21 Oct 2025	ES2533521	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW160	0021_MW160_211221	21 Dec 2021	ES2147061	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW160	0021_MW160_241023	23 Oct 2024	ES2435078	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW160	0021_QC105_241023	23 Oct 2024	ES2435078	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW160	0021_QC205_241023	23 Oct 2024	1154751	-	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05
Flatrock Creek	Pathway	0021_MW160	0021_MW160_250402	02 Apr 2025	ES2510113	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW160	0021_QC254_250402	02 Apr 2025	1210052	-	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05
Flatrock Creek	Pathway	0021_MW160	0021_MW160_251021	21 Oct 2025	ES2533521	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW163	0021_MW163_220411	11 Apr 2022	ES2213156	-	<0.1	<0.02	<0.02	<0.02	0.21	<0.02	0.05	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW163	0021_MW163_221011	11 Oct 2022	ES2236834	-	<0.1	<0.02	<0.02	0.02	0.17	<0.02	0.06	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW163	0021_MW163_230202	02 Feb 2023	ES2303446	-	<0.1	<0.02	<0.02	<0.02	0.11	<0.02	0.04	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW163	0021_QC103_230202	02 Feb 2023	ES2303446	-	<0.1	<0.02	<0.02	<0.02	0.09	<0.02	0.03	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW163	0021_MW163_241023	23 Oct 2024	ES2435078	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05



Appendix B
Table B5d
Historical Water Analytical Results - Flatrock Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Carboxylic Acids													
	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluorohexanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	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	
EQL	0.01	0.002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.001	0.0005	
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%														
PFAS NEMP 3.0 2025 Recreational water quality														

Catchment	SPR	Location	Field ID	Date	Lab Report No.												
Flatrock Creek	Pathway	0021_MW163	0021_MW163_250402	02 Apr 2025	ES2510113	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW163	0021_MW163_251022	22 Oct 2025	ES2533521	-	<0.1	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW164	0021_MW164_220411	11 Apr 2022	ES2213156	-	<0.1	<0.02	<0.02	0.04	0.32	<0.02	0.06	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW164	0021_QC100_220411	11 Apr 2022	ES2213156	-	<0.1	<0.02	<0.02	0.04	0.31	<0.02	0.06	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW164	0021_MW164_221011	11 Oct 2022	ES2236834	-	<0.1	<0.02	<0.02	0.04	0.27	<0.02	0.06	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW164	0021_QC125_221011	11 Oct 2022	ES2236834	-	<0.1	<0.02	<0.02	0.03	0.24	<0.02	0.05	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW164	0021_MW164_230203	03 Feb 2023	ES2303695	-	<0.1	<0.02	<0.02	0.02	0.06	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW164	0021_MW164_241022	22 Oct 2024	ES2435078	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW164	0021_MW164_250402	02 Apr 2025	ES2510113	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_MW164	0021_MW164_251021	21 Oct 2025	ES2533521	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_SW020	DC_SW05	13 Apr 2017	ES1709064	-	<0.002	<0.0005	<0.0005	0.0071	0.0391	<0.0005	0.0044	<0.0005	<0.0005	<0.0005	<0.001
Flatrock Creek	Pathway	0021_SW020	0021_SW020_211020	20 Oct 2021	ES2138639	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_SW020	0021_SW020_220406	06 Apr 2022	ES2212442	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_SW020	0021_SW020_220707	07 Jul 2022	ES2224473	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_SW020	0021_SW020_221014	14 Oct 2022	ES2237106	-	<0.1	<0.02	<0.02	<0.02	0.08	<0.02	0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_SW020	0021_QC205_230203	03 Feb 2023	961542	-	<0.05	<0.01	<0.01	<0.01	0.08	<0.01	0.03	<0.01	<0.01	<0.01	<0.05
Flatrock Creek	Pathway	0021_SW020	0021_SW020_230203	03 Feb 2023	ES2303695	-	<0.1	<0.02	<0.02	<0.02	0.08	<0.02	0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_SW020	0021_SW020_230421	21 Apr 2023	ES2313364	-	<0.1	<0.02	<0.02	<0.02	0.12	<0.02	0.03	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_SW020	0021_SW020_240412	12 Apr 2024	ES2412012	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_SW020	0021_SW020_241022	22 Oct 2024	ES2435078	-	<0.1	<0.02	<0.02	<0.02	0.09	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_SW020	0021_SW020_250402	02 Apr 2025	ES2510622	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_SW022	FC_SW06	19 Apr 2017	ES1709535	-	<0.002	<0.0005	<0.0005	0.0014	0.0088	<0.0005	0.0033	<0.0005	<0.0005	<0.0005	<0.001
Flatrock Creek	Pathway	0021_SW022	0021_QC208_211020	20 Oct 2021	281322	-	<0.02	<0.02	<0.05	0.01	0.08	<0.01	<0.02	<0.5	<0.1	<0.02	<0.1
Flatrock Creek	Pathway	0021_SW022	0021_SW022_211020	20 Oct 2021	ES2138639	-	<0.1	<0.02	<0.02	<0.02	0.11	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_SW022	0021_SW022_220407	07 Apr 2022	ES2212442	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_SW022	0021_SW022_221012	12 Oct 2022	ES2237106	-	<0.1	<0.02	<0.02	<0.02	0.08	<0.02	0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_SW022	0021_SW022_230419	19 Apr 2023	ES2313364	-	<0.1	<0.02	<0.02	<0.02	0.09	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_SW022	0021_SW022_231018	18 Oct 2023	ES2336399	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_SW022	0021_SW022_240410	10 Apr 2024	ES2412012	-	<0.1	<0.02	<0.02	<0.02	0.05	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_SW022	0021_SW022_241026	26 Oct 2024	ES2435541	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_SW022	0021_SW022_250403	03 Apr 2025	ES2510622	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_SW022	0021_SW022_251022	22 Oct 2025	ES2533521	-	<0.1	<0.02	<0.02	<0.02	0.07	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_SW025	FC_SW09	20 Apr 2017	ES1709644	-	<0.002	<0.0005	<0.0005	<0.0005	0.0019	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
Flatrock Creek	Pathway	0021_SW025	0021_SW025_211026	26 Oct 2021	ES2138639	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_SW025	0021_SW025_220407	07 Apr 2022	ES2212442	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_SW025	0021_SW025_221013	13 Oct 2022	ES2237106	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_SW025	0021_SW025_230419	19 Apr 2023	ES2313364	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_SW025	0021_SW025_240410	10 Apr 2024	ES2412012	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Pathway	0021_SW025	0021_SW025_250404	04 Apr 2025	ES2510622	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW026	FC_SW01	19 Apr 2017	ES1709535	-	<0.002	<0.0005	<0.0005	0.0006	0.0038	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
Flatrock Creek	Receptor	0020_SW026	FC_QC216_180515	15 May 2018	599245	-	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05
Flatrock Creek	Receptor	0020_SW026	FC_SW01_180515	15 May 2018	ES1814324	-	<0.002	<0.0005	<0.0005	<0.0005	0.0026	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	<0.001
Flatrock Creek	Receptor	0020_SW026	0020_SW026_211019	19 Oct 2021	ES2138638	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW026	0020_QC203_220404	04 Apr 2022	293030	-	<0.02	<0.02	<0.05	<0.01	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02	<0.1
Flatrock Creek	Receptor	0020_SW026	0020_SW026_220404	04 Apr 2022	ES2212597	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW026	0020_QC103_220707	07 Jul 2022	ES2224472	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW026	0020_QC203_220707	07 Jul 2022	905319	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05
Flatrock Creek	Receptor	0020_SW026	0020_SW026_220707	07 Jul 2022	ES2224472	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW026	0020_SW026_221010	10 Oct 2022	ES2237104	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW026	0020_SW026_230130	30 Jan 2023	ES2303447	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW026	0020_SW026_230417	17 Apr 2023	ES2313254	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05



Appendix B
Table B5d
Historical Water Analytical Results - Flatrock Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

		PFAS - Perfluoroalkyl Carboxylic Acids											
	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluorohexanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTTrDA)	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
EQL	0.01	0.002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.001	0.0005
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%													
PFAS NEMP 3.0 2025 Recreational water quality													

Catchment	SPR	Location	Field ID	Date	Lab Report No.												
Flatrock Creek	Receptor	0020_SW026	0020_SW026_231016	16 Oct 2023	ES2336397	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW026	0020_SW026_240408	08 Apr 2024	ES2411964	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW026	0020_QC112_241025	25 Oct 2024	ES2435539	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW026	0020_QC212_241025	25 Oct 2024	1156671	-	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05
Flatrock Creek	Receptor	0020_SW026	0020_SW026_241025	25 Oct 2024	ES2435539	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW026	0020_QC251_250401	01 Apr 2025	1209674	-	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05
Flatrock Creek	Receptor	0020_SW026	0020_SW026_250401	01 Apr 2025	ES2510618	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW026	0020_QC120_251020	20 Oct 2025	ES2533546	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW026	0020_QC220_251020	20 Oct 2025	1285219	-	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05
Flatrock Creek	Receptor	0020_SW026	0020_SW026_251020	20 Oct 2025	ES2533546	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW027	FC_SW02	19 Apr 2017	ES1709535	-	<0.002	<0.0005	<0.0005	0.0007	0.0039	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
Flatrock Creek	Receptor	0020_SW027	FC_SW02_180515	15 May 2018	ES1814324	-	<0.002	<0.0005	<0.0005	0.0006	0.0035	<0.0005	0.0009	<0.0005	<0.0005	<0.0005	<0.001
Flatrock Creek	Receptor	0020_SW027	0020_SW027_211019	19 Oct 2021	ES2138638	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW027	0020_QC103_220404	04 Apr 2022	ES2212597	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW027	0020_SW027_220404	04 Apr 2022	ES2212597	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW027	0020_SW027_220707	07 Jul 2022	ES2224472	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW027	0020_SW027_221010	10 Oct 2022	ES2237104	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW027	0020_SW027_230130	30 Jan 2023	ES2303447	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW027	0020_SW027_230417	17 Apr 2023	ES2313254	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW027	0020_SW027_231016	16 Oct 2023	ES2336397	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW027	0020_SW027_240408	08 Apr 2024	ES2411964	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW027	0020_SW027_241025	25 Oct 2024	ES2435539	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW027	0020_QC250_250401	01 Apr 2025	1209674	-	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05
Flatrock Creek	Receptor	0020_SW027	0020_SW027_250401	01 Apr 2025	ES2510618	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW027	0020_SW027_251020	20 Oct 2025	ES2533546	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW029	FC_SW04	19 Apr 2017	ES1709535	-	<0.002	<0.0005	<0.0005	0.0006	0.0037	<0.0005	0.0016	<0.0005	<0.0005	<0.0005	<0.001
Flatrock Creek	Receptor	0020_SW029	FC_SW04_180515	15 May 2018	ES1814324	-	<0.002	<0.0005	<0.0005	0.0010	0.0077	<0.0005	0.0013	<0.0005	<0.0005	<0.0005	<0.001
Flatrock Creek	Receptor	0020_SW029	0020_SW029_211018	18 Oct 2021	ES2138638	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW029	0020_QC104_220404	04 Apr 2022	ES2212597	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW029	0020_QC204_220404	04 Apr 2022	293030	-	<0.02	<0.02	<0.05	<0.01	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02	<0.1
Flatrock Creek	Receptor	0020_SW029	0020_SW029_220404	04 Apr 2022	ES2212597	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW029	0020_SW029_221011	10 Oct 2022	ES2237104	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW029	0020_SW029_230417	17 Apr 2023	ES2313254	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW029	0020_SW029_231016	16 Oct 2023	ES2336397	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW029	0020_SW029_240408	08 Apr 2024	ES2411964	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW029	0020_QC151_241021	21 Oct 2024	ES2435143	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW029	0020_SW029_241021	21 Oct 2024	ES2435143	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW029	0020_SW029_250331	31 Mar 2025	ES2510618	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW029	0020_SW029_251020	20 Oct 2025	ES2533546	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW033	FC_SW14_180406	06 Apr 2018	ES1810551	-	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
Flatrock Creek	Receptor	0020_SW033	FC_SW14_180515	15 May 2018	ES1814324	-	<0.002	<0.0005	<0.0005	<0.0005	0.0018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
Flatrock Creek	Receptor	0020_SW033	0020_SW033_211019	19 Oct 2021	ES2138638	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW033	0020_SW033_220404	04 Apr 2022	ES2212597	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW033	0020_SW033_221010	10 Oct 2022	ES2237104	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW033	0020_SW033_230417	17 Apr 2023	ES2313254	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW033	0020_SW033_231016	16 Oct 2023	ES2336397	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW033	0020_SW033_240408	08 Apr 2024	ES2411964	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW033	0020_SW033_241025	25 Oct 2024	ES2435539	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW033	0020_SW033_250401	01 Apr 2025	ES2510618	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Flatrock Creek	Receptor	0020_SW033	0020_SW033_251020	20 Oct 2025	ES2533546	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05



	PFAS - Perfluoroalkyl Carboxylic Acids												
	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTriDA)	Perfluoroundecanoic acid (PFUnDA)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)
EQL	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
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.01	0.002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.001	0.0005
PFAS NEMP 3.0 2025 Recreational water quality													

Statistics														
Number of Results	3	356	356	356	356	356	356	356	356	356	356	356	356	356
Number of Detects	0	27	1	1	92	167	3	103	0	0	1	0	0	0
Minimum Concentration	<0.01	0.002	<0.0005	<0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.0005
Minimum Detect	ND	0.002	0.0081	0.0015	0.0006	0.0005	0.0012	0.0006	ND	ND	0.0027	ND	ND	ND
Maximum Concentration	<0.01	0.8	<0.02	<0.05	0.71	3.85	<0.02	2.84	<0.5	<0.1	<0.02	<0.1	<0.05	<0.05
Maximum Detect	ND	0.8	0.0081	0.0015	0.71	3.85	0.0079	2.84	ND	ND	0.0027	ND	ND	ND
Average Concentration *	0.005	0.063	0.0087	0.0093	0.027	0.13	0.0085	0.085	0.031	0.01	0.0087	0.024	0.01	0.01
Geometric Average *	0.005	0.034	0.0066	0.0068	0.01	0.022	0.0065	0.013	0.015	0.007	0.0066	0.017	0.0073	0.0073
Median Concentration *	0.005	0.05	0.01	0.01	0.01	0.01	0.01	0.01	0.025	0.01	0.01	0.025	0.01	0.01
Standard Deviation *	0	0.099	0.0031	0.0045	0.078	0.46	0.0031	0.32	0.047	0.0089	0.0031	0.0093	0.005	0.005
Geometric Standard Deviation *	1	3.8	3	3.1	3.6	5.1	2.9	5	4.6	3.3	3	3.3	3.2	3.2
95% UCL (Student's-t) *	0.005	0.0715	0.00894	0.00968	0.034	0.169	0.00874	0.113	0.0347	0.0111	0.00893	0.0243	0.0104	0.0104
Number of Env Standard Exceedances	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
% of Detects	0	8	0	0	26	47	1	29	0	0	0	0	0	0
% of Non-Detects	100	92	100	100	74	53	99	71	100	100	100	100	100	100
% of Detects at or above Env Standards	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

* 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 Reported Analyte LOR is higher than Requested Analyte LOR



Appendix B
Table B5d
Historical Water Analytical Results - Flatrock Creek

	PFAS - Perfluoroalkyl Sulfonamide					PFAS - Fluorotelomer Sulfonic Acids			
	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidacetic 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
EQL	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%									
PFAS NEMP 3.0 2025 Recreational water quality									

Catchment	SPR	Location	Field ID	Date	Lab Report No.									
Flatrock Creek	Source	0020_MW037	MW037	01 May 2017	ES1710866		<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001
Flatrock Creek	Source	0020_MW037	0020_MW037_211018	18 Oct 2021	ES2138638		<0.05	<0.05	<0.02	<0.05	<0.02	0.06	1.78	<0.05
Flatrock Creek	Source	0020_MW037	0020_MW037_220404	04 Apr 2022	ES2212597		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	0.36	<0.05
Flatrock Creek	Source	0020_MW037	0020_MW037_221010	10 Oct 2022	ES2237104		<0.05	<0.05	<0.02	<0.05	<0.02	0.05	3.16	<0.05
Flatrock Creek	Source	0020_MW037	0020_MW037_230417	17 Apr 2023	ES2313254		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	1.18	<0.05
Flatrock Creek	Source	0020_MW037	0020_MW037_231016	16 Oct 2023	ES2336397		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	4.19	<0.05
Flatrock Creek	Source	0020_MW037	0020_SW037_231016	16 Oct 2023	ES2336397		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Source	0020_MW037	0020_MW037_240408	08 Apr 2024	ES2411964		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	5.60	<0.05
Flatrock Creek	Source	0020_MW037	0020_MW037_241022	22 Oct 2024	ES2435143		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	8.39	<0.05
Flatrock Creek	Source	0020_MW037	0020_MW037_250331	31 Mar 2025	ES2510618		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	3.58	<0.05
Flatrock Creek	Source	0020_MW037	0020_QC131_250331	31 Mar 2025	ES2510618		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	3.87	<0.05
Flatrock Creek	Source	0020_MW037	0020_QC231_250331	31 Mar 2025	1209674		<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	4.0	<0.01
Flatrock Creek	Source	0020_MW037	0020_MW037_251020	20 Oct 2025	ES2533546		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	6.93	<0.05
Flatrock Creek	Source	0020_MW112	F_MW02	01 May 2017	ES1710866		<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001
Flatrock Creek	Source	0020_MW112	0020_MW112_211018	18 Oct 2021	ES2138638		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Source	0020_MW112	0020_MW112_220404	04 Apr 2022	ES2212597		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Source	0020_MW112	0020_MW112_221010	10 Oct 2022	ES2237104		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Source	0020_MW112	0020_MW112_230417	17 Apr 2023	ES2313254		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Source	0020_MW112	0020_MW112_231016	16 Oct 2023	ES2336397		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Source	0020_MW112	0020_MW112_240408	08 Apr 2024	ES2411964		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Source	0020_MW112	0020_MW112_241021	21 Oct 2024	ES2435143		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Source	0020_MW112	0020_QC251_241021	21 Oct 2024	1154740		<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01
Flatrock Creek	Source	0020_MW112	0020_MW112_250331	31 Mar 2025	ES2510618		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Source	0020_MW112	0020_QC130_250331	31 Mar 2025	ES2510618		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Source	0020_MW112	0020_QC230_250331	31 Mar 2025	1209674		<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01
Flatrock Creek	Source	0020_MW112	0020_MW112_251020	20 Oct 2025	ES2533546		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Source	0020_SW016	E_Irrigation_03	26 Oct 2017	ES1726858		<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	0.018	<0.001
Flatrock Creek	Source	0020_SW016	TNQA301	26 Oct 2017	569797		<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	0.021	<0.001
Flatrock Creek	Source	0020_SW016	0020_SW016_211018	18 Oct 2021	ES2138638		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Source	0020_SW016	0020_SW016_220408	08 Apr 2022	ES2212597		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Source	0020_SW016	0020_SW016_221011	11 Oct 2022	ES2237104		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Source	0020_SW016	0020_SW016_230417	17 Apr 2023	ES2313254		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Source	0020_SW016	0020_SW016_231016	16 Oct 2023	ES2336397		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Source	0020_SW016	0020_SW016_240408	08 Apr 2024	ES2411964		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Source	0020_SW016	0020_SW016_241021	21 Oct 2024	ES2435143		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Source	0020_SW016	0020_SW016_250331	31 Mar 2025	ES2510618		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Source	0020_SW016	0020_SW016_251020	20 Oct 2025	ES2533546		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Source	0021_MW026	MW026	28 Apr 2017	ES1710200		<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001
Flatrock Creek	Source	0021_MW026	0021_MW026_190214	14 Feb 2019	ES1905115		<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	0.019	<0.001
Flatrock Creek	Source	0021_MW026	0021_QC110_190214	14 Feb 2019	ES1905115		<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	0.016	<0.001
Flatrock Creek	Source	0021_MW026	0021_MW026_190529	29 May 2019	ES1916831		<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	0.004	<0.001
Flatrock Creek	Source	0021_MW026	0021_MW026_211020	20 Oct 2021	ES2138639		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Source	0021_MW026	0021_MW026_220406	06 Apr 2022	ES2212442		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Source	0021_MW026	0021_MW026_221014	14 Oct 2022	ES2237106		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Source	0021_MW026	0021_MW026_230421	21 Apr 2023	ES2313364		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Source	0021_MW026	0021_MW026_231019	19 Oct 2023	ES2336398		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Source	0021_MW026	0021_MW026_240412	12 Apr 2024	ES2411994		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Source	0021_MW026	0021_MW026_241022	22 Oct 2024	ES2435078		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Source	0021_MW026	0021_QC104_241022	22 Oct 2024	ES2435078		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Source	0021_MW026	0021_QC204_241022	22 Oct 2024	1154751		<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01
Flatrock Creek	Source	0021_MW026	0021_MW026_250407	07 Apr 2025	ES2510113		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05



Appendix B
Table B5d
Historical Water Analytical Results - Flatrock Creek

	PFAS - Perfluoroalkyl Sulfonamide					PFAS - Fluorotelomer Sulfonic Acids			
	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOA)	N-Methyl perfluorooctane sulfonamidacetic acid (MeFOAA)	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
EQL	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%									
PFAS NEMP 3.0 2025 Recreational water quality									

Catchment	SPR	Location	Field ID	Date	Lab Report No.									
Flatrock Creek	Source	0021_MW026	0021_MW026_251021	21 Oct 2025	ES2533521	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Source	0021_MW117	C_MW01	03 May 2017	ES1710866	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Flatrock Creek	Source	0021_MW117	0021_MW117_211020	20 Oct 2021	ES2138639	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Source	0021_MW117	0021_QC203_211020	20 Oct 2021	281322	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Flatrock Creek	Source	0021_MW117	0021_MW117_221014	14 Oct 2022	ES2237106	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Source	0021_MW117	0021_MW117_230421	21 Apr 2023	ES2313364	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Source	0021_MW117	0021_MW117_231019	19 Oct 2023	ES2336398	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Source	0021_MW117	0021_MW117_240412	12 Apr 2024	ES2411994	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Source	0021_MW117	0021_MW117_241022	22 Oct 2024	ES2435078	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Source	0021_MW117	0021_MW117_250402	02 Apr 2025	ES2510113	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Source	0021_MW117	0021_MW117_251021	21 Oct 2025	ES2533521	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Source	0021_MW118	C_MW02	03 May 2017	ES1710866	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Flatrock Creek	Source	0021_MW118	0021_MW118_211026	26 Oct 2021	ES2138639	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Source	0021_MW118	0021_MW118_221011	11 Oct 2022	ES2237106	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Source	0021_MW118	0021_MW118_230203	03 Feb 2023	ES2303695	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Source	0021_MW118	0021_MW118_230421	21 Apr 2023	ES2313364	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Source	0021_MW118	0021_MW118_231019	19 Oct 2023	ES2336398	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Source	0021_MW118	0021_MW118_240412	12 Apr 2024	ES2411994	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Source	0021_MW118	0021_MW118_241022	22 Oct 2024	ES2435078	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Source	0021_MW118	0021_MW118_250402	02 Apr 2025	ES2510113	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Source	0021_MW118	0021_MW118_251021	21 Oct 2025	ES2533521	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Source	0021_MW118	0021_QC140_251021	21 Oct 2025	ES2533538	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Source	0021_MW118	0021_QC240_251021	21 Oct 2025	1285374	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Flatrock Creek	Pathway	0020_MW001	MW001	08 May 2017	ES1711220	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Flatrock Creek	Pathway	0020_MW001	0020_MW001_220412	12 Apr 2022	ES2213152	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW001	0020_MW001_221010	10 Oct 2022	ES2236866	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW001	0020_MW001_230131	31 Jan 2023	ES2303447	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW001	0020_QC201_230131	31 Jan 2023	961653	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Flatrock Creek	Pathway	0020_MW001	0020_MW001_250407	07 Apr 2025	ES2510618	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW001	0020_MW001_251023	23 Oct 2025	ES2533546	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW007	0020_MW007_180411	11 Apr 2018	ES1810721	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Flatrock Creek	Pathway	0020_MW007	0020_MW007_211015	15 Oct 2021	ES2138638	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW007	0020_QC100_211015	15 Oct 2021	ES2138638	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW007	0020_MW007_220404	04 Apr 2022	ES2212597	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW007	0020_MW007_221010	10 Oct 2022	ES2237104	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW007	0020_MW007_230131	31 Jan 2023	ES2303447	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW007	0020_MW007_230417	17 Apr 2023	ES2313254	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW007	0020_MW007_231016	16 Oct 2023	ES2336397	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW007	0020_MW007_240408	08 Apr 2024	ES2411964	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW007	0020_MW007_250407	07 Apr 2025	ES2510618	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW007	0020_MW007_251023	23 Oct 2025	ES2533546	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW007	0020_QC105_251023	23 Oct 2025	ES2533546	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW007	0020_QC205_251023	23 Oct 2025	1285219	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Flatrock Creek	Pathway	0020_MW017	MW017	01 May 2017	ES1710866	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Flatrock Creek	Pathway	0020_MW017	0020_MW017_211015	15 Oct 2021	ES2138638	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW017	0020_MW017_220404	04 Apr 2022	ES2212597	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW017	0020_MW017_221011	11 Oct 2022	ES2237104	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW017	0020_MW017_230201	01 Feb 2023	ES2303447	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW017	0020_MW017_230417	17 Apr 2023	ES2313254	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW017	0020_QC104_230417	17 Apr 2023	ES2313254	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW017	0020_QC204_230417	17 Apr 2023	321518	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02



Appendix B
Table B5d
Historical Water Analytical Results - Flatrock Creek

	PFAS - Perfluoroalkyl Sulfonamide					PFAS - Fluorotelomer Sulfonic Acids			
	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidacetic 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
EQL	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%									
PFAS NEMP 3.0 2025 Recreational water quality									

Catchment	SPR	Location	Field ID	Date	Lab Report No.									
Flatrock Creek	Pathway	0020_MW017	0020_MW017_231016	16 Oct 2023	ES2336397	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW017	0020_MW017_240408	08 Apr 2024	ES2411964	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW017	0020_MW017_241021	21 Oct 2024	ES2435143	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW017	0020_MW017_250331	31 Mar 2025	ES2510618	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW017	0020_MW017_251020	20 Oct 2025	ES2533546	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW068	0020_MW068_221010	10 Oct 2022	ES2236866	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW068	0020_MW068_230131	31 Jan 2023	ES2303447	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	0.07	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW068	0020_MW068_241021	21 Oct 2024	ES2435143	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW068	0020_MW068_250401	01 Apr 2025	ES2510618	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW068	0020_MW068_251020	20 Oct 2025	ES2533546	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW069	0020_MW069_250424	24 Apr 2025	ES2512752	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW069	0020_MW069_251020	20 Oct 2025	ES2533546	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW109	E_MW04	01 May 2017	ES1710866	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Flatrock Creek	Pathway	0020_MW109	E_MW04_180503	03 May 2018	ES1812871	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW109	0020_MW109_211015	15 Oct 2021	ES2138638	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	0.17	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW109	0020_MW109_220404	04 Apr 2022	ES2212597	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW109	0020_QC100_220404	04 Apr 2022	ES2212597	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW109	0020_QC200_220404	04 Apr 2022	293030	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Flatrock Creek	Pathway	0020_MW109	0020_MW109_221011	11 Oct 2022	ES2237104	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW109	0020_MW109_230131	31 Jan 2023	ES2303447	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW109	0020_QC101_230131	31 Jan 2023	ES2303447	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW109	0020_MW109_230417	17 Apr 2023	ES2313254	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW109	0020_MW109_231016	16 Oct 2023	ES2336397	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW109	0020_MW109_240408	08 Apr 2024	ES2411964	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW109	0020_QC100_240408	08 Apr 2024	ES2411964	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW109	0020_QC200_240408	08 Apr 2024	348827	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Flatrock Creek	Pathway	0020_MW109	0020_MW109_241021	21 Oct 2024	ES2435143	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW109	0020_MW109_250331	31 Mar 2025	ES2510618	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW109	0020_MW109_251020	20 Oct 2025	ES2533546	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW109	0020_QC140_251020	20 Oct 2025	ES2533546	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW109	0020_QC240_251020	20 Oct 2025	1285219	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Flatrock Creek	Pathway	0020_MW110	E_MW05	01 May 2017	ES1710866	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Flatrock Creek	Pathway	0020_MW110	0020_MW110_211015	15 Oct 2021	ES2138638	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW110	0020_MW110_220404	04 Apr 2022	ES2212597	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW110	0020_QC102_220404	04 Apr 2022	ES2212597	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW110	0020_QC202_220404	04 Apr 2022	293030	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Flatrock Creek	Pathway	0020_MW110	0020_MW110_221011	11 Oct 2022	ES2237104	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW110	0020_MW110_230131	31 Jan 2023	ES2303447	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW110	0020_MW110_230417	17 Apr 2023	ES2313254	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW110	0020_MW110_231016	16 Oct 2023	ES2336397	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW110	0020_MW110_240408	08 Apr 2024	ES2411964	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW110	0020_MW110_241021	21 Oct 2024	ES2435143	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW110	0020_QC250_241021	21 Oct 2024	1154740	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Flatrock Creek	Pathway	0020_MW110	0020_MW110_250331	31 Mar 2025	ES2510618	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_MW110	0020_MW110_251020	20 Oct 2025	ES2533546	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_SW023	F_SW02	10 Apr 2017	ES1708884	<0.001	<0.001	<0.0005	<0.001	0.0600	<0.001	0.048	0.019	0.002
Flatrock Creek	Pathway	0020_SW023	0020_SW023_211019	19 Oct 2021	ES2138638	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	0.10	<0.05	<0.05
Flatrock Creek	Pathway	0020_SW023	0020_SW023_211213	13 Dec 2021	ES2145964	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	0.17	<0.05	<0.05
Flatrock Creek	Pathway	0020_SW023	0020_SW023_220404	04 Apr 2022	ES2212597	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	0.14	<0.05	<0.05
Flatrock Creek	Pathway	0020_SW023	0020_SW023_220708	08 Jul 2022	ES2224472	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_SW023	0020_SW023_221010	10 Oct 2022	ES2237104	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	0.10	<0.05	<0.05



Appendix B
Table B5d
Historical Water Analytical Results - Flatrock Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

EQL	PFAS - Perfluoroalkyl Sulfonamide					PFAS - Fluorotelomer Sulfonic Acids			
	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidacetic 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
	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%									
PFAS NEMP 3.0 2025 Recreational water quality									

Catchment	SPR	Location	Field ID	Date	Lab Report No.									
Flatrock Creek	Pathway	0020_SW023	0020_SW023_230417	17 Apr 2023	ES2313254		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_SW023	0020_SW023_240408	08 Apr 2024	ES2411964		<0.05	<0.05	<0.02	<0.05	<0.02	0.15	<0.05	<0.05
Flatrock Creek	Pathway	0020_SW023	0020_SW023_250331	31 Mar 2025	ES2510618		<0.05	<0.05	<0.02	<0.05	<0.02	0.08	<0.05	<0.05
Flatrock Creek	Pathway	0020_SW030	FC_SW05	20 Apr 2017	ES1709644		<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001
Flatrock Creek	Pathway	0020_SW030	FC_QC113_180430	30 Apr 2018	ES1812871		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_SW030	FC_SW05_180430	30 Apr 2018	ES1812871		<0.005 ^{#2}	<0.005 ^{#2}	<0.0020 ^{#2}	<0.005 ^{#2}	<0.0020 ^{#2}	<0.002 ^{#2}	<0.002 ^{#2}	<0.002 ^{#2}
Flatrock Creek	Pathway	0020_SW030	0020_QC204_211019	19 Oct 2021	281319		<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02
Flatrock Creek	Pathway	0020_SW030	0020_SW030_211019	19 Oct 2021	ES2138638		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_SW030	0020_SW030_220404	04 Apr 2022	ES2212597		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_SW030	0020_SW030_220412	12 Apr 2022	ES2213152		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_SW030	0020_QC104_220708	08 Jul 2022	ES2224472		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_SW030	0020_QC204_220708	08 Jul 2022	905319		<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01
Flatrock Creek	Pathway	0020_SW030	0020_SW030_220708	08 Jul 2022	ES2224472		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_SW030	0020_SW030_221012	12 Oct 2022	ES2236866		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_SW030	0020_SW030_221012	12 Oct 2022	ES2237104		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_SW030	0020_SW030_230201	01 Feb 2023	ES2303447		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_SW030	0020_QC101_230417	17 Apr 2023	ES2313254		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_SW030	0020_QC201_230417	17 Apr 2023	321518		<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02
Flatrock Creek	Pathway	0020_SW030	0020_SW030_230417	17 Apr 2023	ES2313254		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_SW030	0020_SW030_231016	16 Oct 2023	ES2336397		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_SW030	0020_SW030_240408	08 Apr 2024	ES2411964		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_SW030	0020_SW030_241026	26 Oct 2024	ES2435539		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_SW030	0020_SW030_250331	31 Mar 2025	ES2510618		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_SW030	0020_SW030_251022	22 Oct 2025	ES2533546		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_SW054	0020_SW054_220412	12 Apr 2022	ES2213152		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_SW054	0020_SW054_220707	07 Jul 2022	ES2224472		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_SW054	0020_QC126_221012	12 Oct 2022	ES2236866		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_SW054	0020_SW054_221012	12 Oct 2022	ES2236866		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_SW054	0020_QC220_230130	30 Jan 2023	961653		<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01
Flatrock Creek	Pathway	0020_SW054	0020_SW054_230130	30 Jan 2023	ES2303447		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_SW054	0020_SW054_241021	21 Oct 2024	ES2435143		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0020_SW054	0020_SW054_251020	20 Oct 2025	ES2533546		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW125	FC_MW01	04 May 2017	ES1711220		<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	0.003	<0.001
Flatrock Creek	Pathway	0021_MW125	FC_MW01_180503	03 May 2018	ES1812871		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW125	FC_MW01_190214	14 Feb 2019	ES1905115		<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	0.002	<0.001
Flatrock Creek	Pathway	0021_MW125	FC_MW01_190529	29 May 2019	ES1916831		<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001
Flatrock Creek	Pathway	0021_MW125	0021_MW125_211020	20 Oct 2021	ES2138639		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW125	0021_QC207_211020	20 Oct 2021	281322		<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02
Flatrock Creek	Pathway	0021_MW125	0021_MW125_220407	07 Apr 2022	ES2212442		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW125	0021_MW125_221014	14 Oct 2022	ES2237106		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW125	0021_MW125_230202	02 Feb 2023	ES2303446		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW125	0021_QC203_230202	02 Feb 2023	961655		<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01
Flatrock Creek	Pathway	0021_MW125	0021_MW125_230419	19 Apr 2023	ES2313364		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW125	0021_QC104_230419	19 Apr 2023	ES2313364		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW125	0021_QC204_230419	19 Apr 2023	321517		<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02
Flatrock Creek	Pathway	0021_MW125	0021_MW125_231018	18 Oct 2023	ES2336398		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW125	0021_MW125_240410	10 Apr 2024	ES2411994		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW125	0021_MW125_241026	26 Oct 2024	ES2435541		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW125	0021_MW125_251022	22 Oct 2025	ES2533521		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW126	FC_MW02	04 May 2017	ES1711220		<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001
Flatrock Creek	Pathway	0021_MW126	0021_MW126_211020	20 Oct 2021	ES2138639		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05



Appendix B
Table B5d
Historical Water Analytical Results - Flatrock Creek

	PFAS - Perfluoroalkyl Sulfonamide					PFAS - Fluorotelomer Sulfonic Acids			
	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOA)	N-Methyl perfluorooctane sulfonamidacetic acid (MeFOAA)	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
EQL	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%									
PFAS NEMP 3.0 2025 Recreational water quality									

Catchment	SPR	Location	Field ID	Date	Lab Report No.									
Flatrock Creek	Pathway	0021_MW126	0021_QC108_211020	20 Oct 2021	ES2138639	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW126	0021_MW126_220407	07 Apr 2022	ES2212442	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW126	0021_QC209_220407	07 Apr 2022	293031	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Flatrock Creek	Pathway	0021_MW126	0021_MW126_221013	13 Oct 2022	ES2237106	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW126	0021_MW126_230202	02 Feb 2023	ES2303446	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW126	0021_MW126_230419	19 Apr 2023	ES2313364	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW126	0021_MW126_231018	18 Oct 2023	ES2336398	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW126	0021_QC105_231018	18 Oct 2023	ES2336399	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW126	0021_QC205_231018	18 Oct 2023	335876	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Flatrock Creek	Pathway	0021_MW126	0021_MW126_240410	10 Apr 2024	ES2411994	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW126	0021_MW126_241026	26 Oct 2024	ES2435541	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW126	0021_QC116_241026	26 Oct 2024	ES2435541	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW126	0021_QC216_241026	26 Oct 2024	1156160	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Flatrock Creek	Pathway	0021_MW126	0021_MW126_250401	01 Apr 2025	ES2510113	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW126	0021_QC105_250401	01 Apr 2025	ES2510113	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW126	0021_QC205_250401	01 Apr 2025	1210052	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Flatrock Creek	Pathway	0021_MW126	0021_MW126_251022	22 Oct 2025	ES2533521	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW128	LM_MW01	04 May 2017	ES1711220	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Flatrock Creek	Pathway	0021_MW128	LM_MW01_180503	03 May 2018	ES1812871	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW128	LM_MW01_190214	14 Feb 2019	ES1905115	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Flatrock Creek	Pathway	0021_MW128	0021_QC100_190529	29 May 2019	ES1916831	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Flatrock Creek	Pathway	0021_MW128	LM_MW01_190529	29 May 2019	ES1916831	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Flatrock Creek	Pathway	0021_MW128	0021_MW128_211020	20 Oct 2021	ES2138639	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW128	0021_QC107_211020	20 Oct 2021	ES2138639	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW128	0021_MW128_211221	21 Dec 2021	ES2147061	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW128	0021_QC112_211221	21 Dec 2021	ES2147061	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW128	0021_QC212_211221	21 Dec 2021	853283	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Flatrock Creek	Pathway	0021_MW128	0021_MW128_220406	06 Apr 2022	ES2212442	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW128	0021_MW128_221014	14 Oct 2022	ES2237106	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW128	0021_MW128_230201	01 Feb 2023	ES2303446	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW128	0021_MW128_230419	19 Apr 2023	ES2313364	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW128	0021_MW128_231018	18 Oct 2023	ES2336398	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW128	0021_MW128_240410	10 Apr 2024	ES2411994	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW128	0021_QC104_240410	10 Apr 2024	ES2411994	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW128	0021_QC204_240410	10 Apr 2024	348825	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Flatrock Creek	Pathway	0021_MW128	0021_MW128_241023	23 Oct 2024	ES2435078	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW128	0021_MW128_250402	02 Apr 2025	ES2510113	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW128	0021_QC155_250402	02 Apr 2025	ES2510113	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW128	0021_MW128_251021	21 Oct 2025	ES2533521	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW160	0021_MW160_211221	21 Dec 2021	ES2147061	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW160	0021_MW160_241023	23 Oct 2024	ES2435078	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW160	0021_QC105_241023	23 Oct 2024	ES2435078	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW160	0021_QC205_241023	23 Oct 2024	1154751	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Flatrock Creek	Pathway	0021_MW160	0021_MW160_250402	02 Apr 2025	ES2510113	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW160	0021_QC254_250402	02 Apr 2025	1210052	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Flatrock Creek	Pathway	0021_MW160	0021_MW160_251021	21 Oct 2025	ES2533521	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW163	0021_MW163_220411	11 Apr 2022	ES2213156	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW163	0021_MW163_221011	11 Oct 2022	ES2236834	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW163	0021_MW163_230202	02 Feb 2023	ES2303446	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW163	0021_QC103_230202	02 Feb 2023	ES2303446	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW163	0021_MW163_241023	23 Oct 2024	ES2435078	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05



Appendix B
Table B5d
Historical Water Analytical Results - Flatrock Creek

	PFAS - Perfluoroalkyl Sulfonamide					PFAS - Fluorotelomer Sulfonic Acids			
	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidacetic 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
EQL	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%									
PFAS NEMP 3.0 2025 Recreational water quality									

Catchment	SPR	Location	Field ID	Date	Lab Report No.									
Flatrock Creek	Pathway	0021_MW163	0021_MW163_250402	02 Apr 2025	ES2510113		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW163	0021_MW163_251022	22 Oct 2025	ES2533521		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW164	0021_MW164_220411	11 Apr 2022	ES2213156		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW164	0021_QC100_220411	11 Apr 2022	ES2213156		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW164	0021_MW164_221011	11 Oct 2022	ES2236834		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW164	0021_QC125_221011	11 Oct 2022	ES2236834		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW164	0021_MW164_230203	03 Feb 2023	ES2303695		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW164	0021_MW164_241022	22 Oct 2024	ES2435078		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW164	0021_MW164_250402	02 Apr 2025	ES2510113		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_MW164	0021_MW164_251021	21 Oct 2025	ES2533521		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_SW020	DC_SW05	13 Apr 2017	ES1709064		<0.001	<0.001	<0.0005	<0.001	0.0006	<0.001	<0.001	<0.001
Flatrock Creek	Pathway	0021_SW020	0021_SW020_211020	20 Oct 2021	ES2138639		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_SW020	0021_SW020_220406	06 Apr 2022	ES2212442		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_SW020	0021_SW020_220707	07 Jul 2022	ES2224473		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_SW020	0021_SW020_221014	14 Oct 2022	ES2237106		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_SW020	0021_QC205_230203	03 Feb 2023	961542		<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01
Flatrock Creek	Pathway	0021_SW020	0021_SW020_230203	03 Feb 2023	ES2303695		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_SW020	0021_SW020_230421	21 Apr 2023	ES2313364		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_SW020	0021_SW020_240412	12 Apr 2024	ES2412012		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_SW020	0021_SW020_241022	22 Oct 2024	ES2435078		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_SW020	0021_SW020_250402	02 Apr 2025	ES2510622		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_SW022	FC_SW06	19 Apr 2017	ES1709535		<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001
Flatrock Creek	Pathway	0021_SW022	0021_QC208_211020	20 Oct 2021	281322		<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02
Flatrock Creek	Pathway	0021_SW022	0021_SW022_211020	20 Oct 2021	ES2138639		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_SW022	0021_SW022_220407	07 Apr 2022	ES2212442		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_SW022	0021_SW022_221012	12 Oct 2022	ES2237106		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_SW022	0021_SW022_230419	19 Apr 2023	ES2313364		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_SW022	0021_SW022_231018	18 Oct 2023	ES2336399		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_SW022	0021_SW022_240410	10 Apr 2024	ES2412012		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_SW022	0021_SW022_241026	26 Oct 2024	ES2435541		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_SW022	0021_SW022_250403	03 Apr 2025	ES2510622		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_SW022	0021_SW022_251022	22 Oct 2025	ES2533521		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_SW025	FC_SW09	20 Apr 2017	ES1709644		<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001
Flatrock Creek	Pathway	0021_SW025	0021_SW025_211026	26 Oct 2021	ES2138639		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_SW025	0021_SW025_220407	07 Apr 2022	ES2212442		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_SW025	0021_SW025_221013	13 Oct 2022	ES2237106		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_SW025	0021_SW025_230419	19 Apr 2023	ES2313364		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_SW025	0021_SW025_240410	10 Apr 2024	ES2412012		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Pathway	0021_SW025	0021_SW025_250404	04 Apr 2025	ES2510622		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW026	FC_SW01	19 Apr 2017	ES1709535		<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001
Flatrock Creek	Receptor	0020_SW026	FC_QC216_180515	15 May 2018	599245		<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01
Flatrock Creek	Receptor	0020_SW026	FC_SW01_180515	15 May 2018	ES1814324		<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001
Flatrock Creek	Receptor	0020_SW026	0020_SW026_211019	19 Oct 2021	ES2138638		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW026	0020_QC203_220404	04 Apr 2022	293030		<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02
Flatrock Creek	Receptor	0020_SW026	0020_SW026_220404	04 Apr 2022	ES2212597		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW026	0020_QC103_220707	07 Jul 2022	ES2224472		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW026	0020_QC203_220707	07 Jul 2022	905319		<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01
Flatrock Creek	Receptor	0020_SW026	0020_SW026_220707	07 Jul 2022	ES2224472		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW026	0020_SW026_221010	10 Oct 2022	ES2237104		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW026	0020_SW026_230130	30 Jan 2023	ES2303447		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW026	0020_SW026_230417	17 Apr 2023	ES2313254		<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05



Appendix B
Table B5d
Historical Water Analytical Results - Flatrock Creek

	PFAS - Perfluoroalkyl Sulfonamide					PFAS - Fluorotelomer Sulfonic Acids			
	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidacetic 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
EQL	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%									
PFAS NEMP 3.0 2025 Recreational water quality									

Catchment	SPR	Location	Field ID	Date	Lab Report No.									
Flatrock Creek	Receptor	0020_SW026	0020_SW026_231016	16 Oct 2023	ES2336397	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW026	0020_SW026_240408	08 Apr 2024	ES2411964	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW026	0020_QC112_241025	25 Oct 2024	ES2435539	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW026	0020_QC212_241025	25 Oct 2024	1156671	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Flatrock Creek	Receptor	0020_SW026	0020_SW026_241025	25 Oct 2024	ES2435539	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW026	0020_QC251_250401	01 Apr 2025	1209674	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Flatrock Creek	Receptor	0020_SW026	0020_SW026_250401	01 Apr 2025	ES2510618	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW026	0020_QC120_251020	20 Oct 2025	ES2533546	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW026	0020_QC220_251020	20 Oct 2025	1285219	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Flatrock Creek	Receptor	0020_SW026	0020_SW026_251020	20 Oct 2025	ES2533546	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW027	FC_SW02	19 Apr 2017	ES1709535	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Flatrock Creek	Receptor	0020_SW027	FC_SW02_180515	15 May 2018	ES1814324	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Flatrock Creek	Receptor	0020_SW027	0020_SW027_211019	19 Oct 2021	ES2138638	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW027	0020_QC103_220404	04 Apr 2022	ES2212597	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW027	0020_SW027_220404	04 Apr 2022	ES2212597	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW027	0020_SW027_220707	07 Jul 2022	ES2224472	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW027	0020_SW027_221010	10 Oct 2022	ES2237104	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW027	0020_SW027_230130	30 Jan 2023	ES2303447	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW027	0020_SW027_230417	17 Apr 2023	ES2313254	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW027	0020_SW027_231016	16 Oct 2023	ES2336397	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW027	0020_SW027_240408	08 Apr 2024	ES2411964	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW027	0020_SW027_241025	25 Oct 2024	ES2435539	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW027	0020_QC250_250401	01 Apr 2025	1209674	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Flatrock Creek	Receptor	0020_SW027	0020_SW027_250401	01 Apr 2025	ES2510618	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW027	0020_SW027_251020	20 Oct 2025	ES2533546	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW029	FC_SW04	19 Apr 2017	ES1709535	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Flatrock Creek	Receptor	0020_SW029	FC_SW04_180515	15 May 2018	ES1814324	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Flatrock Creek	Receptor	0020_SW029	0020_SW029_211018	18 Oct 2021	ES2138638	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW029	0020_QC104_220404	04 Apr 2022	ES2212597	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW029	0020_QC204_220404	04 Apr 2022	293030	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Flatrock Creek	Receptor	0020_SW029	0020_SW029_220404	04 Apr 2022	ES2212597	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW029	0020_SW029_221011	10 Oct 2022	ES2237104	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW029	0020_SW029_230417	17 Apr 2023	ES2313254	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW029	0020_SW029_231016	16 Oct 2023	ES2336397	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW029	0020_SW029_240408	08 Apr 2024	ES2411964	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW029	0020_QC151_241021	21 Oct 2024	ES2435143	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW029	0020_SW029_241021	21 Oct 2024	ES2435143	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW029	0020_SW029_250331	31 Mar 2025	ES2510618	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW029	0020_SW029_251020	20 Oct 2025	ES2533546	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW033	FC_SW14_180406	06 Apr 2018	ES1810551	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Flatrock Creek	Receptor	0020_SW033	FC_SW14_180515	15 May 2018	ES1814324	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Flatrock Creek	Receptor	0020_SW033	0020_SW033_211019	19 Oct 2021	ES2138638	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW033	0020_SW033_220404	04 Apr 2022	ES2212597	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW033	0020_SW033_221010	10 Oct 2022	ES2237104	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW033	0020_SW033_230417	17 Apr 2023	ES2313254	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW033	0020_SW033_231016	16 Oct 2023	ES2336397	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW033	0020_SW033_240408	08 Apr 2024	ES2411964	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW033	0020_SW033_241025	25 Oct 2024	ES2435539	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW033	0020_SW033_250401	01 Apr 2025	ES2510618	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Flatrock Creek	Receptor	0020_SW033	0020_SW033_251020	20 Oct 2025	ES2533546	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05



	PFAS - Perfluoroalkyl Sulfonamide					PFAS - Fluorotelomer Sulfonic Acids			
	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidacetic 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
EQL	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%									
PFAS NEMP 3.0 2025 Recreational water quality									

Statistics									
Number of Results	356	356	356	356	356	356	356	356	356
Number of Detects	0	0	0	0	2	2	29	1	1
Minimum Concentration	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Minimum Detect	ND	ND	ND	ND	0.0006	0.05	0.002	0.019	0.002
Maximum Concentration	<0.5	<0.05	<0.05	<0.05	<0.1	<0.1	8.39	<0.05	<0.05
Maximum Detect	ND	ND	ND	ND	0.06	0.06	8.39	0.019	0.002
Average Concentration *	0.032	0.022	0.01	0.022	0.012	0.021	0.14	0.021	0.02
Geometric Average *	0.019	0.017	0.0073	0.017	0.008	0.014	0.02	0.015	0.014
Median Concentration *	0.025	0.025	0.01	0.025	0.01	0.025	0.025	0.025	0.025
Standard Deviation *	0.046	0.0075	0.005	0.0075	0.0098	0.0096	0.78	0.0088	0.0089
Geometric Standard Deviation *	3.6	3.2	3.2	3.2	3.3	3.5	4.3	3.3	3.4
95% UCL (Student's-t) *	0.036	0.0231	0.0104	0.0231	0.0127	0.0214	0.213	0.0213	0.0213
Number of Env Standard Exceedances	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
% of Detects	0	0	0	0	1	1	8	0	0
% of Non-Detects	100	100	100	100	99	99	92	100	100
% of Detects at or above Env Standards	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

* 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 Reported Analyte LOR is higher than Requested Analyte LOR



Appendix B
Table B5e(i)
Historical Water Analytical Results - Lakes Surface Water

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

EQI	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids					
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	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)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecane sulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)
	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
	0.0001	0.0005	0.0005	0.0002	0.0002	0.001	0.0002	0.001	0.0005	0.0005	0.002	0.0005	0.01	0.0005
0020_0021_Human health consumption of biota							0.01							
ADWG 2011 Health (v4.0 updated June 2025)	0.008	0.03	0.2						1					
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13		220											
PFAS NEMP 3.0 2025 Recreational water quality	2	2	10				2							

Catchment	SPR	Location	Field ID	Date	Lab Report No.														
Lakes	Receptor	0021_SW032	LM_SD01	27 Jul 2017	ES1718711	0.002	0.0023	<0.0005	0.0043	0.0043	-	0.0043	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005
Lakes	Receptor	0021_SW032	LM_SW01	27 Jul 2017	ES1718711	0.0019	0.0026	<0.0005	0.0045	0.0045	-	0.0045	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005
Lakes	Receptor	0021_SW032	LM_SW01	25 Aug 2017	ES1721233	<0.01	<0.02	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Lakes	Receptor	0021_SW032	LM_SW01_180514	14 May 2018	ES1814324	<0.01	<0.02	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Lakes	Receptor	0021_SW032	LM_SW01_190212	12 Feb 2019	ES1904669	0.001	0.0017	<0.0005	0.0027	0.0027	-	0.0027	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005
Lakes	Receptor	0021_SW032	LM_SW01_190318	18 Mar 2019	ES1908940	0.0030	<0.0020 ^{#1}	<0.0020 ^{#1}	0.0030	0.0030	-	0.0030	-	<0.0020 ^{#1}	<0.0020 ^{#1}	-	<0.0020 ^{#1}	-	<0.0020 ^{#1}
Lakes	Receptor	0021_SW032	0021_SW032_211021	21 Oct 2021	ES2138639	0.02	<0.01	<0.01	0.02	0.02	-	0.02	-	<0.02	<0.02	-	<0.02	-	<0.02
Lakes	Receptor	0021_SW032	0021_SW032_220405	05 Apr 2022	ES2212442	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Lakes	Receptor	0021_SW032	0021_SW032_221010	10 Oct 2022	ES2237106	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Lakes	Receptor	0021_SW032	0021_SW032_230418	18 Apr 2023	ES2313364	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Lakes	Receptor	0021_SW032	0021_SW032_231017	17 Oct 2023	ES2336399	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Lakes	Receptor	0021_SW032	0021_SW032_240409	09 Apr 2024	ES2412012	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Lakes	Receptor	0021_SW032	0021_QC113_241025	25 Oct 2024	ES2435541	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Lakes	Receptor	0021_SW032	0021_QC213_241025	25 Oct 2024	1156146	<0.01	<0.01	<0.01	<0.1	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Lakes	Receptor	0021_SW032	0021_SW032_241025	25 Oct 2024	ES2435541	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Lakes	Receptor	0021_SW032	0021_SW032_250404	04 Apr 2025	ES2510622	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Lakes	Receptor	0021_SW032	0021_SW032_251022	22 Oct 2025	ES2533521	<0.002	0.002	<0.002	0.002	0.002	-	0.002	-	<0.002	<0.002	<0.002	<0.002	<0.01	<0.002
Lakes	Receptor	0021_SW034	LM_SW03	27 Jul 2017	ES1718711	0.0018	0.0021	<0.0005	0.0039	0.0039	-	0.0039	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005
Lakes	Receptor	0021_SW034	LM_SW03	25 Aug 2017	ES1721233	<0.01	<0.02	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Lakes	Receptor	0021_SW034	LM_SW03_180514	14 May 2018	ES1814324	<0.01	<0.02	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Lakes	Receptor	0021_SW034	LM_QC106_190212	12 Feb 2019	ES1904669	0.0012	0.0014	<0.0005	0.0026	0.0026	-	0.0026	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005
Lakes	Receptor	0021_SW034	LM_SW03_190212	12 Feb 2019	ES1904669	0.0013	0.0017	<0.0005	0.003	0.003	-	0.003	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005
Lakes	Receptor	0021_SW034	LM_SW03_190318	18 Mar 2019	ES1908940	0.0024	0.0032	<0.0020 ^{#1}	0.0056	0.0056	-	0.0056	-	<0.0020 ^{#1}	<0.0020 ^{#1}	-	<0.0020 ^{#1}	-	<0.0020 ^{#1}
Lakes	Receptor	0021_SW034	0021_SW034_211021	21 Oct 2021	ES2138639	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Lakes	Receptor	0021_SW034	0021_SW034_220405	05 Apr 2022	ES2212442	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Lakes	Receptor	0021_SW034	0021_SW034_221010	10 Oct 2022	ES2237106	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Lakes	Receptor	0021_SW034	0021_SW034_230418	18 Apr 2023	ES2313364	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Lakes	Receptor	0021_SW034	0021_SW034_231017	17 Oct 2023	ES2336399	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Lakes	Receptor	0021_SW034	0021_SW034_240409	09 Apr 2024	ES2412012	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Lakes	Receptor	0021_SW034	0021_SW034_241025	25 Oct 2024	ES2435541	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Lakes	Receptor	0021_SW034	0021_SW034_250404	04 Apr 2025	ES2510622	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Lakes	Receptor	0021_SW034	0021_SW034_251022	22 Oct 2025	ES2533521	0.003	0.002	<0.002	0.005	0.005	-	0.005	-	<0.002	<0.002	<0.002	<0.002	<0.01	<0.002
Lakes	Receptor	0021_SW037	LW_SW02	27 Jul 2017	ES1718711	0.001	0.0006	<0.0005	0.0016	0.0016	-	0.0016	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005
Lakes	Receptor	0021_SW037	LW_SW02	25 Aug 2017	ES1721233	<0.01	<0.02	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Lakes	Receptor	0021_SW037	LW_QC117_180516	16 May 2018	ES1814324	<0.01	<0.02	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Lakes	Receptor	0021_SW037	LW_SW02_180516	16 May 2018	ES1814324	<0.01	<0.02	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Lakes	Receptor	0021_SW037	LW_QC109_190212	12 Feb 2019	ES1905115	0.0006	<0.0005	<0.0005	0.0006	0.0006	-	0.0006	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005
Lakes	Receptor	0021_SW037	LW_SW02_190212	12 Feb 2019	ES1905115	0.0009	<0.0005	<0.0005	0.0009	0.0009	-	0.0009	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005
Lakes	Receptor	0021_SW037	LW_QC109_190318	18 Mar 2019	ES1908940	0.0004	<0.0005	<0.0005	0.0004	0.0004	-	0.0004	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005
Lakes	Receptor	0021_SW037	LW_QC201_190319	18 Mar 2019	647214	<0.0001	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	<0.001
Lakes	Receptor	0021_SW037	LW_SW02_190318	18 Mar 2019	ES1908940	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	-	<0.0003	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005
Lakes	Receptor	0021_SW037	0021_SW037_211022	22 Oct 2021	ES2138639	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005
Lakes	Receptor	0021_SW037	0021_SW037_220406	06 Apr 2022	ES2212442	0.0008	<0.0005	<0.0005	0.0041	0.0041	-	0.0008	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005
Lakes	Receptor	0021_SW037	0021_SW037_221010	10 Oct 2022	ES2237106	0.0017	<0.0005	<0.0005	0.0068	0.0068	-	0.0017	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005
Lakes	Receptor	0021_SW037	0021_SW037_230418	18 Apr 2023	ES2313364	0.0006	<0.0005	<0.0005	0.0006	0.0006	-	0.0006	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005
Lakes	Receptor	0021_SW037	0021_SW037_231017	17 Oct 2023	ES2336399	0.0004	<0.0005	<0.0005	0.0004	0.0004	-	0.0004	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005
Lakes	Receptor	0021_SW037	0021_SW037_240409	09 Apr 2024	ES2412012	0.0020	0.0044	0.0009	0.0083	0.0083	-	0.0064	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005
Lakes	Receptor	0021_SW037	0021_SW037_241025	25 Oct 2024	ES2435541	0.0007	<0.0005	<0.0005	0.0007	0.0007	-	0.0007	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005
Lakes	Receptor	0021_SW037	0021_SW037_250407	07 Apr 2025	ES2510622	0.0007	<0.0005	<0.0005	0.0007	0.0007	-	0.0007	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005



Appendix B
Table B5e(i)
Historical Water Analytical Results - Lakes Surface Water

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids					
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	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)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)
	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	0.0001	0.0005	0.0005	0.0002	0.0002	0.001	0.0002	0.001	0.0005	0.0005	0.002	0.0005	0.01	0.0005
0020_0021_Human health consumption of biota							0.01							
ADWG 2011 Health (v4.0 updated June 2025)	0.008	0.03	0.2						1					
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13		220											
PFAS NEMP 3.0 2025 Recreational water quality	2	2	10				2							

Catchment	SPR	Location	Field ID	Date	Lab Report No.														
Lakes	Receptor	0021_SW037	0021_SW037_251021	21 Oct 2025	ES2533521	<0.002	<0.002	<0.002	<0.002	<0.002	-	<0.002	-	<0.002	<0.002	<0.002	<0.002	<0.01	<0.002
Lakes	Receptor	0021_SW040	LW_SW05_180406	06 Apr 2018	ES1810551	0.0007	0.0006	<0.0005	0.0013	0.0013	-	0.0013	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005
Lakes	Receptor	0021_SW040	LW_QC103_190211	11 Feb 2019	ES1904669	0.0009	<0.0005	<0.0005	0.0009	0.0009	-	0.0009	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005
Lakes	Receptor	0021_SW040	LW_SW05_190212	12 Feb 2019	ES1905115	0.0004	<0.0005	<0.0005	0.0004	0.0004	-	0.0004	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005
Lakes	Receptor	0021_SW040	LW_SW05_190318	18 Mar 2019	ES1908940	0.0017	0.0007	<0.0005	0.0024	0.0024	-	0.0024	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005
Lakes	Receptor	0021_SW040	0021_SW040_230418	18 Apr 2023	ES2313364	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Lakes	Receptor	0021_SW040	0021_SW040_231017	17 Oct 2023	ES2336399	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Lakes	Receptor	0021_SW040	0021_SW040_240409	09 Apr 2024	ES2412012	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Lakes	Receptor	0021_SW040	0021_QC115_241025	25 Oct 2024	ES2435541	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Lakes	Receptor	0021_SW040	0021_QC215_241025	25 Oct 2024	1156146	<0.01	<0.01	<0.01	<0.1	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Lakes	Receptor	0021_SW040	0021_SW040_241025	25 Oct 2024	ES2435541	0.0009	<0.0005	<0.0005	0.0009	0.0009	-	0.0009	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005
Lakes	Receptor	0021_SW040	0021_SW040_250404	04 Apr 2025	ES2510622	0.0007	<0.0005	<0.0005	0.0007	0.0007	-	0.0007	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005
Lakes	Receptor	0021_SW040	0021_SW040_251021	21 Oct 2025	ES2533521	<0.002	<0.002	<0.002	<0.002	<0.002	-	<0.002	-	<0.002	<0.002	<0.002	<0.002	<0.01	<0.002

Statistics

Number of Results	62	62	62	62	62	3	62	3	62	62	6	62	6	62
Number of Detects	27	13	1	28	28	0	28	0	28	0	0	0	0	0
Minimum Concentration	<0.0001	<0.0005	<0.0005	<0.0002	<0.0002	<0.001	<0.0002	<0.001	<0.0005	<0.0005	<0.002	<0.0005	<0.01	<0.0005
Minimum Detect	0.0004	0.0006	0.0009	0.0004	0.0004	ND	0.0004	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	0.02	<0.02	<0.01	<0.1	<0.05	<0.01	0.02	<0.01	<0.02	<0.02	<0.01	<0.02	<0.01	<0.02
Maximum Detect	0.02	0.0044	0.0009	0.02	0.02	ND	0.02	ND	ND	ND	ND	ND	ND	ND
Average Concentration *	0.0032	0.0035	0.0026	0.0053	0.0045	0.0035	0.0036	0.0035	0.0049	0.0049	0.0023	0.0049	0.005	0.0049
Geometric Average *	0.002	0.0019	0.0013	0.0029	0.0028	0.0023	0.0025	0.0023	0.0017	0.0017	0.0017	0.0017	0.005	0.0017
Median Concentration *	0.003	0.0038	0.001	0.005	0.005	0.005	0.005	0.005	0.001	0.001	0.001	0.001	0.005	0.001
Standard Deviation *	0.003	0.0031	0.0023	0.0087	0.0048	0.0026	0.0029	0.0026	0.0048	0.0048	0.0021	0.0048	0	0.0048
Geometric Standard Deviation *	3.1	3.8	4.1	3.2	3	3.8	2.9	3.8	5.7	5.7	2.3	5.7	1	5.7
95% UCL (Student's-t) *	0.00387	0.00416	0.00313	0.00714	0.00549	0.00788	0.00426	0.00788	0.00589	0.00589	0.00403	0.00589	0.005	0.00589
Number of Env Standard Exceedances	30	7	0	0	0	0	1	0	0	0	0	0	0	0
Number of Env Standard Exceedances (Detects Only)	1	0	0	0	0	0	1	0	0	0	0	0	0	0
% of Detects	44	21	2	45	45	0	45	0	0	0	0	0	0	0
% of Non-Detects	56	79	98	55	55	100	55	100	100	100	100	100	100	100
% of Detects at or above Env Standards	2	0	0	0	0	0	2	0	0	0	0	0	0	0
% of Results Below Env Standards or Non-Detect	98	100	100	100	100	100	98	100	100	100	100	100	100	100

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Reported Analyte LOR is higher than Requested Analyte LOR



Appendix B
Table B5e(i)
Historical Water Analytical Results - Lakes Surface Water

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Carboxylic Acids											N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)
	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluoronanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluoro-n- hexadecanoic acid (PFHxDA)		
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L		
EQL	0.002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.005	0.001	0.0005
0020_0021_Human health consumption of biota													
ADWG 2011 Health (v4.0 updated June 2025)													
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%													
PFAS NEMP 3.0 2025 Recreational water quality													

Catchment	SPR	Location	Field ID	Date	Lab Report No.													
Lakes	Receptor	0021_SW032	LM_SD01	27 Jul 2017	ES1718711		<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005
Lakes	Receptor	0021_SW032	LM_SW01	27 Jul 2017	ES1718711		<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005
Lakes	Receptor	0021_SW032	LM_SW01	25 Aug 2017	ES1721233		<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	-	<0.05	<0.02
Lakes	Receptor	0021_SW032	LM_SW01_180514	14 May 2018	ES1814324		<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	-	<0.05	<0.02
Lakes	Receptor	0021_SW032	LM_SW01_190212	12 Feb 2019	ES1904669		<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005
Lakes	Receptor	0021_SW032	LM_SW01_190318	18 Mar 2019	ES1908940		<0.002	<0.0020 ^{#1}	<0.0020 ^{#1}	<0.0020 ^{#1}	<0.0020 ^{#1}	<0.0020 ^{#1}	<0.0050 ^{#1}	<0.0020 ^{#1}	<0.0020 ^{#1}	-	<0.005 ^{#1}	<0.0020 ^{#1}
Lakes	Receptor	0021_SW032	0021_SW032_211021	21 Oct 2021	ES2138639		<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05	<0.02
Lakes	Receptor	0021_SW032	0021_SW032_220405	05 Apr 2022	ES2212442		<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05	<0.02
Lakes	Receptor	0021_SW032	0021_SW032_221010	10 Oct 2022	ES2237106		<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05	<0.02
Lakes	Receptor	0021_SW032	0021_SW032_230418	18 Apr 2023	ES2313364		<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05	<0.02
Lakes	Receptor	0021_SW032	0021_SW032_231017	17 Oct 2023	ES2336399		<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05	<0.02
Lakes	Receptor	0021_SW032	0021_SW032_240409	09 Apr 2024	ES2412012		<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05	<0.02
Lakes	Receptor	0021_SW032	0021_QC113_241025	25 Oct 2024	ES2435541		<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05	<0.02
Lakes	Receptor	0021_SW032	0021_QC213_241025	25 Oct 2024	1156146		<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.05	<0.05
Lakes	Receptor	0021_SW032	0021_SW032_241025	25 Oct 2024	ES2435541		<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05	<0.02
Lakes	Receptor	0021_SW032	0021_SW032_250404	04 Apr 2025	ES2510622		<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05	<0.02
Lakes	Receptor	0021_SW032	0021_SW032_251022	22 Oct 2025	ES2533521		<0.01	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.002	<0.002	<0.005	<0.005	<0.002
Lakes	Receptor	0021_SW034	LM_SW03	27 Jul 2017	ES1718711		<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005
Lakes	Receptor	0021_SW034	LM_SW03	25 Aug 2017	ES1721233		<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05	<0.02
Lakes	Receptor	0021_SW034	LM_SW03_180514	14 May 2018	ES1814324		<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05	<0.02
Lakes	Receptor	0021_SW034	LM_QC106_190212	12 Feb 2019	ES1904669		<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005
Lakes	Receptor	0021_SW034	LM_SW03_190212	12 Feb 2019	ES1904669		<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005
Lakes	Receptor	0021_SW034	LM_SW03_190318	18 Mar 2019	ES1908940		<0.002	<0.0020 ^{#1}	<0.0020 ^{#1}	<0.0020 ^{#1}	<0.0020 ^{#1}	<0.0020 ^{#1}	<0.0050 ^{#1}	<0.0020 ^{#1}	<0.0020 ^{#1}	-	<0.005 ^{#1}	<0.0020 ^{#1}
Lakes	Receptor	0021_SW034	0021_SW034_211021	21 Oct 2021	ES2138639		<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05	<0.02
Lakes	Receptor	0021_SW034	0021_SW034_220405	05 Apr 2022	ES2212442		<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05	<0.02
Lakes	Receptor	0021_SW034	0021_SW034_221010	10 Oct 2022	ES2237106		<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05	<0.02
Lakes	Receptor	0021_SW034	0021_SW034_230418	18 Apr 2023	ES2313364		<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05	<0.02
Lakes	Receptor	0021_SW034	0021_SW034_231017	17 Oct 2023	ES2336399		<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05	<0.02
Lakes	Receptor	0021_SW034	0021_SW034_240409	09 Apr 2024	ES2412012		<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05	<0.02
Lakes	Receptor	0021_SW034	0021_SW034_241025	25 Oct 2024	ES2435541		<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05	<0.02
Lakes	Receptor	0021_SW034	0021_SW034_250404	04 Apr 2025	ES2510622		<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05	<0.02
Lakes	Receptor	0021_SW034	0021_SW034_251022	22 Oct 2025	ES2533521		<0.01	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.002	<0.002	<0.005	<0.005	<0.002
Lakes	Receptor	0021_SW037	LW_SW02	27 Jul 2017	ES1718711		<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005
Lakes	Receptor	0021_SW037	LW_SW02	25 Aug 2017	ES1721233		<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05	<0.02
Lakes	Receptor	0021_SW037	LW_QC117_180516	16 May 2018	ES1814324		<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05	<0.02
Lakes	Receptor	0021_SW037	LW_SW02_180516	16 May 2018	ES1814324		<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05	<0.02
Lakes	Receptor	0021_SW037	LW_QC109_190212	12 Feb 2019	ES1905115		<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005
Lakes	Receptor	0021_SW037	LW_SW02_190212	12 Feb 2019	ES1905115		<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005
Lakes	Receptor	0021_SW037	LW_QC109_190318	18 Mar 2019	ES1908940		<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005
Lakes	Receptor	0021_SW037	LW_QC201_190319	18 Mar 2019	647214		<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.005	<0.005
Lakes	Receptor	0021_SW037	LW_SW02_190318	18 Mar 2019	ES1908940		<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005
Lakes	Receptor	0021_SW037	0021_SW037_211022	22 Oct 2021	ES2138639		<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005
Lakes	Receptor	0021_SW037	0021_SW037_220406	06 Apr 2022	ES2212442		0.0033	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005
Lakes	Receptor	0021_SW037	0021_SW037_221010	10 Oct 2022	ES2237106		<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005
Lakes	Receptor	0021_SW037	0021_SW037_230418	18 Apr 2023	ES2313364		<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005
Lakes	Receptor	0021_SW037	0021_SW037_231017	17 Oct 2023	ES2336399		<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005
Lakes	Receptor	0021_SW037	0021_SW037_240409	09 Apr 2024	ES2412012		<0.0020	<0.0005	<0.0005	<0.0005	0.0010	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005
Lakes	Receptor	0021_SW037	0021_SW037_241025	25 Oct 2024	ES2435541		<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005
Lakes	Receptor	0021_SW037	0021_SW037_250407	07 Apr 2025	ES2510622		<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005



	PFAS - Perfluoroalkyl Carboxylic Acids												
	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTTrDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluoro-n-hexadecanoic acid (PFHxDA)	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
EQL	0.002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.005	0.001	0.0005
0020_0021_Human health consumption of biota													
ADWG 2011 Health (v4.0 updated June 2025)													
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%													
PFAS NEMP 3.0 2025 Recreational water quality													

Catchment	SPR	Location	Field ID	Date	Lab Report No.													
Lakes	Receptor	0021_SW037	0021_SW037_251021	21 Oct 2025	ES2533521	<0.01	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.002	<0.002	<0.005	<0.005	<0.002
Lakes	Receptor	0021_SW040	LW_SW05_180406	06 Apr 2018	ES1810551	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005
Lakes	Receptor	0021_SW040	LW_QC103_190211	11 Feb 2019	ES1904669	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005
Lakes	Receptor	0021_SW040	LW_SW05_190212	12 Feb 2019	ES1905115	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005
Lakes	Receptor	0021_SW040	LW_SW05_190318	18 Mar 2019	ES1908940	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005
Lakes	Receptor	0021_SW040	0021_SW040_230418	18 Apr 2023	ES2313364	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05	<0.02
Lakes	Receptor	0021_SW040	0021_SW040_231017	17 Oct 2023	ES2336399	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05	<0.02
Lakes	Receptor	0021_SW040	0021_SW040_240409	09 Apr 2024	ES2412012	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05	<0.02
Lakes	Receptor	0021_SW040	0021_QC115_241025	25 Oct 2024	ES2435541	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05	<0.02
Lakes	Receptor	0021_SW040	0021_QC215_241025	25 Oct 2024	1156146	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.05	<0.05
Lakes	Receptor	0021_SW040	0021_SW040_241025	25 Oct 2024	ES2435541	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005
Lakes	Receptor	0021_SW040	0021_SW040_250404	04 Apr 2025	ES2510622	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005
Lakes	Receptor	0021_SW040	0021_SW040_251021	21 Oct 2025	ES2533521	<0.01	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.002	<0.002	<0.005	<0.005	<0.002

Statistics																		
Number of Results	62	62	62	62	62	62	62	62	62	62	62	62	62	62	4	62	62	
Number of Detects	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	
Minimum Concentration	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.005	<0.001	<0.0005	
Minimum Detect	0.0033	ND	ND	ND	0.001	ND	0.0051	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Maximum Concentration	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.005	<0.05	<0.05	
Maximum Detect	0.0033	ND	ND	ND	0.001	ND	0.0051	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Average Concentration *	0.024	0.0049	0.0049	0.0049	0.0049	0.0049	0.005	0.012	0.0049	0.0049	0.0049	0.0025	0.013	0.0056				
Geometric Average *	0.0075	0.0017	0.0017	0.0017	0.0017	0.0017	0.0018	0.0028	0.0017	0.0017	0.0017	0.0025	0.004	0.0018				
Median Concentration *	0.005	0.001	0.001	0.001	0.001	0.001	0.003	0.0025	0.001	0.001	0.001	0.0025	0.0025	0.00175				
Standard Deviation *	0.024	0.0048	0.0048	0.0048	0.0047	0.0048	0.0047	0.012	0.0048	0.0048	0.0048	0	0.012	0.0059				
Geometric Standard Deviation *	6.4	5.7	5.7	5.7	5.6	5.7	5.6	8.6	5.7	5.7	5.7	1	6.4	6				
95% UCL (Student's-t) *	0.0293	0.00589	0.00589	0.00589	0.0059	0.00589	0.00596	0.0144	0.00589	0.00589	0.00589	0.0025	0.0152	0.00682				
Number of Env Standard Exceedances	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				
% of Detects	2	0	0	0	2	0	2	0	0	0	0	0	0	0				
% of Non-Detects	98	100	100	100	98	100	98	100	100	100	100	100	100	100				
% of Detects at or above Env Standards	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				

* A Non Detect Multiplier of 0.5 has been applied.

Comments
#1 Reported Analyte LOR is higher than Requested Analyte LOR



Appendix B
Table B5e(i)
Historical Water Analytical Results - Lakes Surface Water

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Sulfonamide						PFAS - Fluorotelomer Sulfonic Acids			
	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidacetic acid (MeFOsAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (PFOSA)	2-(N-methylperfluoro-1- octane sulfonamido)- ethanol (N-MeFOSE)	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
EQL	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001	0.001
0020_0021_Human health consumption of biota										
ADWG 2011 Health (v4.0 updated June 2025)										
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%										
PFAS NEMP 3.0 2025 Recreational water quality										

Catchment	SPR	Location	Field ID	Date	Lab Report No.										
Lakes	Receptor	0021_SW032	LM_SD01	27 Jul 2017	ES1718711	<0.001	<0.001	<0.0005	<0.05	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001
Lakes	Receptor	0021_SW032	LM_SW01	27 Jul 2017	ES1718711	<0.001	<0.001	<0.0005	<0.05	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001
Lakes	Receptor	0021_SW032	LM_SW01	25 Aug 2017	ES1721233	<0.05	<0.05	<0.02	<0.05	<0.02	-	<0.05	<0.05	<0.05	<0.05
Lakes	Receptor	0021_SW032	LM_SW01_180514	14 May 2018	ES1814324	<0.05	<0.05	<0.02	<0.05	<0.02	-	<0.05	<0.05	<0.05	<0.05
Lakes	Receptor	0021_SW032	LM_SW01_190212	12 Feb 2019	ES1904669	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
Lakes	Receptor	0021_SW032	LM_SW01_190318	18 Mar 2019	ES1908940	<0.005 ^{#1}	<0.005 ^{#1}	<0.0020 ^{#1}	<0.005 ^{#1}	<0.0020 ^{#1}	-	<0.002 ^{#1}	<0.002 ^{#1}	<0.002 ^{#1}	<0.002 ^{#1}
Lakes	Receptor	0021_SW032	0021_SW032_211021	21 Oct 2021	ES2138639	<0.05	<0.05	<0.02	<0.05	<0.02	-	<0.05	<0.05	<0.05	<0.05
Lakes	Receptor	0021_SW032	0021_SW032_220405	05 Apr 2022	ES2212442	<0.05	<0.05	<0.02	<0.05	<0.02	-	<0.05	<0.05	<0.05	<0.05
Lakes	Receptor	0021_SW032	0021_SW032_221010	10 Oct 2022	ES2237106	<0.05	<0.05	<0.02	<0.05	<0.02	-	<0.05	<0.05	<0.05	<0.05
Lakes	Receptor	0021_SW032	0021_SW032_230418	18 Apr 2023	ES2313364	<0.05	<0.05	<0.02	<0.05	<0.02	-	<0.05	<0.05	<0.05	<0.05
Lakes	Receptor	0021_SW032	0021_SW032_231017	17 Oct 2023	ES2336399	<0.05	<0.05	<0.02	<0.05	<0.02	-	<0.05	<0.05	<0.05	<0.05
Lakes	Receptor	0021_SW032	0021_SW032_240409	09 Apr 2024	ES2412012	<0.05	<0.05	<0.02	<0.05	<0.02	-	<0.05	<0.05	<0.05	<0.05
Lakes	Receptor	0021_SW032	0021_QC113_241025	25 Oct 2024	ES2435541	<0.05	<0.05	<0.02	<0.05	<0.02	-	<0.05	<0.05	<0.05	<0.05
Lakes	Receptor	0021_SW032	0021_QC213_241025	25 Oct 2024	1156146	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.01	<0.05	<0.01	<0.01
Lakes	Receptor	0021_SW032	0021_SW032_241025	25 Oct 2024	ES2435541	<0.05	<0.05	<0.02	<0.05	<0.02	-	<0.05	<0.05	<0.05	<0.05
Lakes	Receptor	0021_SW032	0021_SW032_250404	04 Apr 2025	ES2510622	<0.05	<0.05	<0.02	<0.05	<0.02	-	<0.05	<0.05	<0.05	<0.05
Lakes	Receptor	0021_SW032	0021_SW032_251022	22 Oct 2025	ES2533521	<0.005	<0.005	<0.002	<0.005	<0.002	-	<0.005	<0.005	<0.005	<0.005
Lakes	Receptor	0021_SW034	LM_SW03	27 Jul 2017	ES1718711	<0.001	<0.001	<0.0005	<0.05	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001
Lakes	Receptor	0021_SW034	LM_SW03	25 Aug 2017	ES1721233	<0.05	<0.05	<0.02	<0.05	<0.02	-	<0.05	<0.05	<0.05	<0.05
Lakes	Receptor	0021_SW034	LM_SW03_180514	14 May 2018	ES1814324	<0.05	<0.05	<0.02	<0.05	<0.02	-	<0.05	<0.05	<0.05	<0.05
Lakes	Receptor	0021_SW034	LM_QC106_190212	12 Feb 2019	ES1904669	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
Lakes	Receptor	0021_SW034	LM_SW03_190212	12 Feb 2019	ES1904669	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
Lakes	Receptor	0021_SW034	LM_SW03_190318	18 Mar 2019	ES1908940	<0.005 ^{#1}	<0.005 ^{#1}	<0.0020 ^{#1}	<0.005 ^{#1}	<0.0020 ^{#1}	-	<0.002 ^{#1}	<0.002 ^{#1}	<0.002 ^{#1}	<0.002 ^{#1}
Lakes	Receptor	0021_SW034	0021_SW034_211021	21 Oct 2021	ES2138639	<0.05	<0.05	<0.02	<0.05	<0.02	-	<0.05	<0.05	<0.05	<0.05
Lakes	Receptor	0021_SW034	0021_SW034_220405	05 Apr 2022	ES2212442	<0.05	<0.05	<0.02	<0.05	<0.02	-	<0.05	<0.05	<0.05	<0.05
Lakes	Receptor	0021_SW034	0021_SW034_221010	10 Oct 2022	ES2237106	<0.05	<0.05	<0.02	<0.05	<0.02	-	<0.05	<0.05	<0.05	<0.05
Lakes	Receptor	0021_SW034	0021_SW034_230418	18 Apr 2023	ES2313364	<0.05	<0.05	<0.02	<0.05	<0.02	-	<0.05	<0.05	<0.05	<0.05
Lakes	Receptor	0021_SW034	0021_SW034_231017	17 Oct 2023	ES2336399	<0.05	<0.05	<0.02	<0.05	<0.02	-	<0.05	<0.05	<0.05	<0.05
Lakes	Receptor	0021_SW034	0021_SW034_240409	09 Apr 2024	ES2412012	<0.05	<0.05	<0.02	<0.05	<0.02	-	<0.05	<0.05	<0.05	<0.05
Lakes	Receptor	0021_SW034	0021_SW034_241025	25 Oct 2024	ES2435541	<0.05	<0.05	<0.02	<0.05	<0.02	-	<0.05	<0.05	<0.05	<0.05
Lakes	Receptor	0021_SW034	0021_SW034_250404	04 Apr 2025	ES2510622	<0.05	<0.05	<0.02	<0.05	<0.02	-	<0.05	<0.05	<0.05	<0.05
Lakes	Receptor	0021_SW034	0021_SW034_251022	22 Oct 2025	ES2533521	<0.005	<0.005	<0.002	<0.005	<0.002	-	<0.005	<0.005	<0.005	<0.005
Lakes	Receptor	0021_SW037	LW_SW02	27 Jul 2017	ES1718711	<0.001	<0.001	<0.0005	<0.05	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001
Lakes	Receptor	0021_SW037	LW_SW02	25 Aug 2017	ES1721233	<0.05	<0.05	<0.02	<0.05	<0.02	-	<0.05	<0.05	<0.05	<0.05
Lakes	Receptor	0021_SW037	LW_QC117_180516	16 May 2018	ES1814324	<0.05	<0.05	<0.02	<0.05	<0.02	-	<0.05	<0.05	<0.05	<0.05
Lakes	Receptor	0021_SW037	LW_SW02_180516	16 May 2018	ES1814324	<0.05	<0.05	<0.02	<0.05	<0.02	-	<0.05	<0.05	<0.05	<0.05
Lakes	Receptor	0021_SW037	LW_QC109_190212	12 Feb 2019	ES1905115	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
Lakes	Receptor	0021_SW037	LW_SW02_190212	12 Feb 2019	ES1905115	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
Lakes	Receptor	0021_SW037	LW_QC109_190318	18 Mar 2019	ES1908940	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
Lakes	Receptor	0021_SW037	LW_QC201_190319	18 Mar 2019	647214	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.001	<0.005	<0.001	<0.001
Lakes	Receptor	0021_SW037	LW_SW02_190318	18 Mar 2019	ES1908940	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
Lakes	Receptor	0021_SW037	0021_SW037_211022	22 Oct 2021	ES2138639	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
Lakes	Receptor	0021_SW037	0021_SW037_220406	06 Apr 2022	ES2212442	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
Lakes	Receptor	0021_SW037	0021_SW037_221010	10 Oct 2022	ES2237106	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
Lakes	Receptor	0021_SW037	0021_SW037_230418	18 Apr 2023	ES2313364	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
Lakes	Receptor	0021_SW037	0021_SW037_231017	17 Oct 2023	ES2336399	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
Lakes	Receptor	0021_SW037	0021_SW037_240409	09 Apr 2024	ES2412012	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
Lakes	Receptor	0021_SW037	0021_SW037_241025	25 Oct 2024	ES2435541	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
Lakes	Receptor	0021_SW037	0021_SW037_250407	07 Apr 2025	ES2510622	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001



Appendix B
Table B5e(i)
Historical Water Analytical Results - Lakes Surface Water

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Sulfonamide						PFAS - Fluorotelomer Sulfonic Acids			
	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidacetic acid (MeFOsAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (PFOSA)	2-(N-methylperfluoro-1- octane sulfonamido)- ethanol (N-MeFOSE)	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
EQL	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001	0.001
0020_0021_Human health consumption of biota										
ADWG 2011 Health (v4.0 updated June 2025)										
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%										
PFAS NEMP 3.0 2025 Recreational water quality										

Catchment	SPR	Location	Field ID	Date	Lab Report No.										
Lakes	Receptor	0021_SW037	0021_SW037_251021	21 Oct 2025	ES2533521	<0.005	<0.005	<0.002	<0.005	<0.002	-	<0.005	<0.005	<0.005	<0.005
Lakes	Receptor	0021_SW040	LW_SW05_180406	06 Apr 2018	ES1810551	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
Lakes	Receptor	0021_SW040	LW_QC103_190211	11 Feb 2019	ES1904669	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
Lakes	Receptor	0021_SW040	LW_SW05_190212	12 Feb 2019	ES1905115	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
Lakes	Receptor	0021_SW040	LW_SW05_190318	18 Mar 2019	ES1908940	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
Lakes	Receptor	0021_SW040	0021_SW040_230418	18 Apr 2023	ES2313364	<0.05	<0.05	<0.02	<0.05	<0.02	-	<0.05	<0.05	<0.05	<0.05
Lakes	Receptor	0021_SW040	0021_SW040_231017	17 Oct 2023	ES2336399	<0.05	<0.05	<0.02	<0.05	<0.02	-	<0.05	<0.05	<0.05	<0.05
Lakes	Receptor	0021_SW040	0021_SW040_240409	09 Apr 2024	ES2412012	<0.05	<0.05	<0.02	<0.05	<0.02	-	<0.05	<0.05	<0.05	<0.05
Lakes	Receptor	0021_SW040	0021_QC115_241025	25 Oct 2024	ES2435541	<0.05	<0.05	<0.02	<0.05	<0.02	-	<0.05	<0.05	<0.05	<0.05
Lakes	Receptor	0021_SW040	0021_QC215_241025	25 Oct 2024	1156146	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.01	<0.05	<0.01	<0.01
Lakes	Receptor	0021_SW040	0021_SW040_241025	25 Oct 2024	ES2435541	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
Lakes	Receptor	0021_SW040	0021_SW040_250404	04 Apr 2025	ES2510622	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
Lakes	Receptor	0021_SW040	0021_SW040_251021	21 Oct 2025	ES2533521	<0.005	<0.005	<0.002	<0.005	<0.002	-	<0.005	<0.005	<0.005	<0.005

Statistics										
Number of Results	62	62	62	62	62	4	62	62	62	62
Number of Detects	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.05	<0.05	<0.05	<0.05	<0.05	<0.001	<0.05	<0.05	<0.05	<0.05
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *	0.013	0.013	0.0056	0.014	0.0056	0.0005	0.012	0.013	0.012	0.012
Geometric Average *	0.004	0.004	0.0018	0.0051	0.0018	0.0005	0.0036	0.0039	0.0036	0.0036
Median Concentration *	0.0025	0.0025	0.00175	0.025	0.00175	0.0005	0.0025	0.0025	0.0025	0.0025
Standard Deviation *	0.012	0.012	0.0059	0.012	0.0059	0	0.012	0.012	0.012	0.012
Geometric Standard Deviation *	6.4	6.4	6	6.2	6	1	6.4	6.5	6.4	6.4
95% UCL (Student's-t) *	0.0152	0.0152	0.00682	0.0167	0.00682	0.0005	0.0144	0.0151	0.0144	0.0144
Number of Env Standard Exceedances	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
% of Detects	0	0	0	0	0	0	0	0	0	0
% of Non-Detects	100	100	100	100	100	100	100	100	100	100
% of Detects at or above Env Standards	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

* A Non Detect Multiplier of 0.5 has been applied.

Comments
#1 Reported Analyte LOR is higher than Requested Analyte LOR



Appendix B
Table B5e(ii)
Historical Water Analytical Results - Lakes Groundwater

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids			
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	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)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecane sulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)
EQL	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.001	0.0004	0.0005	0.001	0.0005
0020_0021_Human health consumption of biota							0.01					
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13		220									
PFAS NEMP 3.0 2025 Recreational water quality	2	2	10				2					

Catchment	SPR	Location	Field ID	Date	Lab Report No.												
Lakes	Pathway	0021_MW129	LM_MW02_180413	13 Apr 2018	ES1810721	0.0014	0.0018	<0.0005	0.0032	0.0032	-	0.0032	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW129	LM_MW02_PRE_180413	13 Apr 2018	ES1810721	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	-	<0.0003	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW129	LM_MW02_180503	03 May 2018	ES1812871	<0.01	<0.02	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02
Lakes	Pathway	0021_MW129	LM_MW02_190213	13 Feb 2019	ES1905115	0.0006	<0.0005	<0.0005	0.0036	0.0036	-	0.0006	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW129	LM_MW02_190531	31 May 2019	ES1916831	0.0048	<0.0005	0.0006	0.0353	0.0353	-	0.0048	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW129	0021_MW129_211022	22 Oct 2021	ES2138639	<0.0002	<0.0005	<0.0005	0.0050	0.0050	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW129	0021_MW129_220406	06 Apr 2022	ES2212442	<0.0002	0.0017	<0.0005	0.0037	0.0037	-	0.0017	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW129	0021_MW129_221010	10 Oct 2022	ES2237106	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW129	0021_MW129_230418	18 Apr 2023	ES2313364	0.0005	<0.0005	<0.0005	0.0005	0.0005	-	0.0005	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW129	0021_MW129_231017	17 Oct 2023	ES2336398	0.0003	<0.0005	<0.0005	0.0003	0.0003	-	0.0003	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW129	0021_MW129_240409	09 Apr 2024	ES2411994	0.0066	0.0026	<0.0005	0.0103	0.0103	-	0.0092	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW129	0021_MW129_241026	26 Oct 2024	ES2435541	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	-	<0.0003	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW129	0021_MW129_250404	04 Apr 2025	ES2510113	0.0008	<0.0005	<0.0005	0.0008	0.0008	-	0.0008	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW129	0021_MW129_251021	21 Oct 2025	ES2533521	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02
Lakes	Pathway	0021_MW130	LW_MW01_180412	12 Apr 2018	ES1810721	0.0026	0.0016	<0.0005	0.0042	0.0042	-	0.0042	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW130	LW_MW01_180515	15 May 2018	ES1814324	<0.01	<0.02	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02
Lakes	Pathway	0021_MW130	LW_MW01_190213	13 Feb 2019	ES1905115	0.0004	<0.0005	<0.0005	0.0024	0.0024	-	0.0004	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW130	LW_MW01_190530	30 May 2019	ES1916831	<0.0003	<0.0005	<0.0005	0.0040	0.0040	-	<0.0003	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW130	0021_MW130_211021	21 Oct 2021	ES2138639	<0.01	<0.01	<0.01	0.07	0.07	-	<0.01	-	<0.02	<0.02	-	<0.02
Lakes	Pathway	0021_MW130	0021_MW130_220406	06 Apr 2022	ES2212442	0.0002	<0.0005	<0.0005	0.0022	0.0022	-	0.0002	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW130	0021_QC105_220406	06 Apr 2022	ES2212442	0.0002	<0.0005	<0.0005	0.0022	0.0022	-	0.0002	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW130	0021_MW130_221010	10 Oct 2022	ES2237106	0.0005	<0.0005	<0.0005	0.0005	0.0005	-	0.0005	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW130	0021_MW130_230418	18 Apr 2023	ES2313364	0.0003	<0.0005	<0.0005	0.0003	0.0003	-	0.0003	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW130	0021_MW130_231017	17 Oct 2023	ES2336398	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW130	0021_MW130_240409	09 Apr 2024	ES2411994	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW130	0021_MW130_241026	26 Oct 2024	ES2435541	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	-	<0.0003	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW130	0021_MW130_250404	04 Apr 2025	ES2510113	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	-	<0.0003	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW130	0021_MW130_251021	21 Oct 2025	ES2533521	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02
Lakes	Pathway	0021_MW135	LM_MW03A_190530	30 May 2019	ES1916831	0.0010	<0.0005	<0.0005	0.0010	0.0010	-	0.0010	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW135	0021_MW135_211021	21 Oct 2021	ES2138639	<0.0002	<0.0005	<0.0005	0.0140	0.0140	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW135	0021_QC112_211021	21 Oct 2021	ES2138639	<0.0002	<0.0005	<0.0005	0.0140	0.0140	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW135	0021_MW135_220406	06 Apr 2022	ES2212442	<0.0002	<0.0005	<0.0005	0.0050	0.0050	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW135	0021_MW135_221010	10 Oct 2022	ES2237106	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW135	0021_MW135_230418	18 Apr 2023	ES2313364	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW135	0021_MW135_231017	17 Oct 2023	ES2336398	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW135	0021_QC103_231017	17 Oct 2023	ES2336399	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW135	0021_QC203_231017	17 Oct 2023	335876	0.0003	0.0002	0.0002	0.001	-	0.0005	0.0005	-	<0.0004	<0.002	-	<0.001
Lakes	Pathway	0021_MW135	0021_MW135_240409	09 Apr 2024	ES2411994	0.0056	<0.0005	0.0020	0.0085	0.0076	-	0.0056	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW135	0021_MW135_241026	26 Oct 2024	ES2435541	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	-	<0.0003	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW135	0021_MW135_250404	04 Apr 2025	ES2510113	0.0020	<0.0005	<0.0005	0.0180	0.0180	-	0.0020	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW135	0021_MW135_251022	22 Oct 2025	ES2533521	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02
Lakes	Pathway	0021_MW136	LM_MW03B_190530	30 May 2019	ES1916831	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	-	<0.0003	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW136	0021_MW136_211021	21 Oct 2021	ES2138639	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW136	0021_MW136_220406	06 Apr 2022	ES2212442	0.0003	<0.0005	0.0010	0.0139	0.0139	-	0.0003	-	<0.0005	<0.0005	-	<0.0005



Appendix B
Table B5e(ii)
Historical Water Analytical Results - Lakes Groundwater

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids			
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	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)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecane sulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)
	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	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.001	0.0004	0.0005	0.001	0.0005
0020_0021_Human health consumption of biota							0.01					
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13		220									
PFAS NEMP 3.0 2025 Recreational water quality	2	2	10				2					

Catchment	SPR	Location	Field ID	Date	Lab Report No.												
Lakes	Pathway	0021_MW136	0021_MW136_221010	10 Oct 2022	ES2237106	0.0015	<0.0005	<0.0005	0.0015	0.0015	-	0.0015	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW136	0021_MW136_230418	18 Apr 2023	ES2313364	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW136	0021_MW136_231017	17 Oct 2023	ES2336398	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW136	0021_MW136_240409	09 Apr 2024	ES2411994	<0.0002	<0.0005	<0.0005	0.0033	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW136	0021_MW136_241026	26 Oct 2024	ES2435541	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	-	<0.0003	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW136	0021_QC120_241026	26 Oct 2024	ES2435541	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	-	<0.0003	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW136	0021_QC220_241026	26 Oct 2024	ES2435541	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	-	<0.0003	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW136	0021_MW136_250404	04 Apr 2025	ES2510113	0.0006	<0.0005	<0.0005	0.0006	0.0006	-	0.0006	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW136	0021_MW136_251022	22 Oct 2025	ES2533521	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02
Lakes	Pathway	0021_MW136	0021_QC141_251022	22 Oct 2025	ES2533538	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02
Lakes	Pathway	0021_MW136	0021_QC241_251022	22 Oct 2025	1285374	<0.01	<0.01	<0.01	<0.1	<0.05	-	<0.01	-	<0.01	<0.01	<0.01	<0.01
Lakes	Pathway	0021_MW137	0021_QC201_190530	30 May 2019	660059	<0.0001	<0.001	<0.001	<0.1	<0.05	<0.01	<0.01	<0.01	<0.001	<0.001	-	<0.001
Lakes	Pathway	0021_MW137	LM_MW03C_190530	30 May 2019	ES1916831	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	-	<0.0003	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW137	0021_MW137_211021	21 Oct 2021	ES2138639	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW137	0021_QC212_211021	21 Oct 2021	281322	0.0003	<0.0002	<0.0002	0.0003	-	0.0003	0.0003	-	<0.0004	<0.002	-	<0.001
Lakes	Pathway	0021_MW137	0021_MW137_220406	06 Apr 2022	ES2212442	0.0002	<0.0005	<0.0005	0.0002	0.0002	-	0.0002	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW137	0021_MW137_221010	10 Oct 2022	ES2237106	0.0013	0.0008	<0.0005	0.0021	0.0021	-	0.0021	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW137	0021_MW137_230418	18 Apr 2023	ES2313364	<0.0002	<0.0005	<0.0005	0.0012	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW137	0021_MW137_231017	17 Oct 2023	ES2336398	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW137	0021_MW137_240409	09 Apr 2024	ES2411994	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW137	0021_MW137_241026	26 Oct 2024	ES2435541	0.0030	0.0005	0.0005	0.0040	0.0040	-	0.0035	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW137	0021_MW137_250404	04 Apr 2025	ES2510113	0.0129	0.0061	<0.0005	0.0209	0.0202	-	0.0190	-	0.0012	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW137	0021_MW137_251022	22 Oct 2025	ES2533521	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02
Lakes	Pathway	0021_MW138	LW_MW02A_190530	30 May 2019	ES1916831	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	-	<0.0003	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW138	0021_MW138_211021	21 Oct 2021	ES2138639	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02
Lakes	Pathway	0021_MW138	0021_MW138_220405	05 Apr 2022	ES2212442	0.0006	<0.0005	<0.0005	0.0222	0.0222	-	0.0006	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW138	0021_QC200_220405	05 Apr 2022	293031	0.0007	<0.0002	<0.0002	0.039	-	0.0007	0.0007	-	<0.0004	<0.002	-	<0.001
Lakes	Pathway	0021_MW138	0021_MW138_221010	10 Oct 2022	ES2237106	<0.0002	<0.0005	<0.0005	0.0110	0.0110	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW138	0021_QC200_221010	10 Oct 2022	308187	<0.01	<0.01	<0.01	0.03	-	<0.01	<0.01	-	<0.01	<0.02	-	<0.01
Lakes	Pathway	0021_MW138	0021_MW138_230418	18 Apr 2023	ES2313364	<0.0002	<0.0005	<0.0005	0.0140	0.0140	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW138	0021_MW138_231017	17 Oct 2023	ES2336398	<0.0002	<0.0005	<0.0005	0.0127	0.0127	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW138	0021_MW138_240409	09 Apr 2024	ES2411994	<0.0002	<0.0005	<0.0005	0.0115	0.0115	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW138	0021_MW138_241026	26 Oct 2024	ES2435541	0.0010	<0.0005	0.0062	0.0664	0.0664	-	0.0010	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW138	0021_MW138_250403	03 Apr 2025	ES2510113	<0.0003	<0.0005	<0.0005	0.0090	0.0090	-	<0.0003	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW138	0021_MW138_251021	21 Oct 2025	ES2533521	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02
Lakes	Pathway	0021_MW139	LW_MW02B_190530	30 May 2019	ES1916831	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	-	<0.0003	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW139	0021_MW139_211021	21 Oct 2021	ES2138639	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02
Lakes	Pathway	0021_MW139	0021_MW139_220405	05 Apr 2022	ES2212442	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW139	0021_QC100_220405	05 Apr 2022	ES2212442	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW139	0021_MW139_221010	10 Oct 2022	ES2237106	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW139	0021_MW139_230418	18 Apr 2023	ES2313364	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW139	0021_QC100_230418	18 Apr 2023	ES2313364	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW139	0021_QC200_230418	18 Apr 2023	321517	0.0003	<0.0002	<0.0002	0.0002	-	0.0002	0.0002	-	<0.0004	<0.002	-	<0.001
Lakes	Pathway	0021_MW139	0021_MW139_231017	17 Oct 2023	ES2336398	0.0009	<0.0005	0.0008	0.0028	0.0028	-	0.0009	-	<0.0005	<0.0005	-	<0.0005



Appendix B
Table B5e(ii)
Historical Water Analytical Results - Lakes Groundwater

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids			
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	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)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecane sulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)
	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	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.001	0.0004	0.0005	0.001	0.0005
0020_0021_Human health consumption of biota							0.01					
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13		220									
PFAS NEMP 3.0 2025 Recreational water quality	2	2	10				2					

Catchment	SPR	Location	Field ID	Date	Lab Report No.												
Lakes	Pathway	0021_MW139	0021_MW139_240409	09 Apr 2024	ES2411994	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW139	0021_QC100_240409	09 Apr 2024	ES2411994	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW139	0021_QC200_240409	09 Apr 2024	348825	<0.0002	<0.0002	<0.0002	<0.0002	-	<0.0002	<0.0002	-	<0.0004	<0.002	-	<0.001
Lakes	Pathway	0021_MW139	0021_MW139_241026	26 Oct 2024	ES2435541	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	-	<0.0003	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW139	0021_MW139_250403	03 Apr 2025	ES2510113	0.0004	<0.0005	<0.0005	0.0004	0.0004	-	0.0004	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW139	0021_QC108_250403	03 Apr 2025	ES2510113	0.0004	<0.0005	<0.0005	0.0004	0.0004	-	0.0004	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW139	0021_QC208_250403	03 Apr 2025	1210052	0.0006	<0.001	<0.001	<0.005	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW139	0021_MW139_251021	21 Oct 2025	ES2533521	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02
Lakes	Pathway	0021_MW140	LW_MW02C_190530	30 May 2019	ES1916831	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	-	<0.0003	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW140	0021_MW140_211021	21 Oct 2021	ES2138639	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02
Lakes	Pathway	0021_MW140	0021_MW140_220405	05 Apr 2022	ES2212442	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW140	0021_MW140_221010	10 Oct 2022	ES2237106	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW140	0021_MW140_230418	18 Apr 2023	ES2313364	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW140	0021_MW140_231017	17 Oct 2023	ES2336398	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW140	0021_MW140_240409	09 Apr 2024	ES2411994	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW140	0021_MW140_241026	26 Oct 2024	ES2435541	0.0007	<0.0005	<0.0005	0.0007	0.0007	-	0.0007	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW140	0021_MW140_250403	03 Apr 2025	ES2510113	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	-	<0.0003	-	<0.0005	<0.0005	-	<0.0005
Lakes	Pathway	0021_MW140	0021_MW140_251021	21 Oct 2025	ES2533521	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02

Statistics

Number of Results	106	106	106	106	100	8	106	2	106	106	2	106
Number of Detects	34	8	7	48	41	4	34	0	1	0	0	0
Minimum Concentration	<0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	<0.001	<0.0004	<0.0005	<0.001	<0.0005
Minimum Detect	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	ND	0.0012	ND	ND	ND
Maximum Concentration	0.0129	<0.02	<0.01	<0.1	0.07	<0.01	0.019	<0.01	<0.02	<0.02	<0.01	<0.02
Maximum Detect	0.0129	0.0061	0.0062	0.07	0.07	0.0007	0.019	ND	0.0012	ND	ND	ND
Average Concentration *	0.0014	0.0012	0.0011	0.0062	0.0053	0.0015	0.0016	0.0028	0.0017	0.0018	0.0028	0.0017
Geometric Average *	0.00039	0.00045	0.00043	0.001	0.00093	0.00063	0.00042	0.0016	0.00045	0.00049	0.0016	0.00047
Median Concentration *	0.00015	0.00025	0.00025	0.0009	0.00065	0.0005	0.000175	0.00275	0.00025	0.00025	0.00275	0.00025
Standard Deviation *	0.0022	0.0021	0.0018	0.013	0.011	0.0021	0.0027	0.0032	0.0034	0.0035	0.0032	0.0034
Geometric Standard Deviation *	4.7	3.4	3.2	8	7.8	4.1	4.9	5.1	3.8	3.8	5.1	3.8
95% UCL (Student's-t) *	0.00173	0.00157	0.00139	0.00825	0.00713	0.00297	0.00199	0.017	0.00228	0.00237	0.017	0.00229
Number of Env Standard Exceedances	1	2	0	0	0	0	1	0	0	0	0	0
Number of Env Standard Exceedances (Detects Only)	1	0	0	0	0	0	1	0	0	0	0	0
% of Detects	32	8	7	45	41	50	32	0	1	0	0	0
% of Non-Detects	68	92	93	55	59	50	68	100	99	100	100	100
% of Detects at or above Env Standards	1	0	0	0	0	0	1	0	0	0	0	0
% of Results Below Env Standards or Non-Detect	99	100	100	100	100	100	99	100	100	100	100	100

* A Non Detect Multiplier of 0.5 has been applied.



Appendix B
Table B5e(ii)
Historical Water Analytical Results - Lakes Groundwater

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	Is		PFAS - Perfluoroalkyl Carboxylic Acids									
	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTriDA)	Perfluoroundecanoic acid (PFUnDA)
	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	0.001	0.0005	0.002	0.0005	0.0005	0.0004	0.0004	0.0005	0.0005	0.0005	0.0005	0.0005
0020_0021_Human health consumption of biota												
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%												
PFAS NEMP 3.0 2025 Recreational water quality												

Catchment	SPR	Location	Field ID	Date	Lab Report No.												
Lakes	Pathway	0021_MW129	LM_MW02_180413	13 Apr 2018	ES1810721	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW129	LM_MW02_PRE_180413	13 Apr 2018	ES1810721	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW129	LM_MW02_180503	03 May 2018	ES1812871	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Lakes	Pathway	0021_MW129	LM_MW02_190213	13 Feb 2019	ES1905115	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW129	LM_MW02_190531	31 May 2019	ES1916831	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW129	0021_MW129_211022	22 Oct 2021	ES2138639	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW129	0021_MW129_220406	06 Apr 2022	ES2212442	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW129	0021_MW129_221010	10 Oct 2022	ES2237106	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW129	0021_MW129_230418	18 Apr 2023	ES2313364	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW129	0021_MW129_231017	17 Oct 2023	ES2336398	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW129	0021_MW129_240409	09 Apr 2024	ES2411994	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	0.0011	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW129	0021_MW129_241026	26 Oct 2024	ES2435541	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW129	0021_MW129_250404	04 Apr 2025	ES2510113	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW129	0021_MW129_251021	21 Oct 2025	ES2533521	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Lakes	Pathway	0021_MW130	LW_MW01_180412	12 Apr 2018	ES1810721	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW130	LW_MW01_180515	15 May 2018	ES1814324	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Lakes	Pathway	0021_MW130	LW_MW01_190213	13 Feb 2019	ES1905115	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW130	LW_MW01_190530	30 May 2019	ES1916831	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW130	0021_MW130_211021	21 Oct 2021	ES2138639	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Lakes	Pathway	0021_MW130	0021_MW130_220406	06 Apr 2022	ES2212442	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW130	0021_QC105_220406	06 Apr 2022	ES2212442	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW130	0021_MW130_221010	10 Oct 2022	ES2237106	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW130	0021_MW130_230418	18 Apr 2023	ES2313364	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW130	0021_MW130_231017	17 Oct 2023	ES2336398	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW130	0021_MW130_240409	09 Apr 2024	ES2411994	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW130	0021_MW130_241026	26 Oct 2024	ES2435541	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW130	0021_MW130_250404	04 Apr 2025	ES2510113	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW130	0021_MW130_251021	21 Oct 2025	ES2533521	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Lakes	Pathway	0021_MW135	LM_MW03A_190530	30 May 2019	ES1916831	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW135	0021_MW135_211021	21 Oct 2021	ES2138639	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW135	0021_QC112_211021	21 Oct 2021	ES2138639	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW135	0021_MW135_220406	06 Apr 2022	ES2212442	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW135	0021_MW135_221010	10 Oct 2022	ES2237106	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW135	0021_MW135_230418	18 Apr 2023	ES2313364	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW135	0021_MW135_231017	17 Oct 2023	ES2336398	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW135	0021_QC103_231017	17 Oct 2023	ES2336399	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW135	0021_QC203_231017	17 Oct 2023	335876	-	<0.001	<0.01	<0.002	<0.005	<0.0004	<0.0004	<0.001	<0.002	<0.05	<0.01	<0.002
Lakes	Pathway	0021_MW135	0021_MW135_240409	09 Apr 2024	ES2411994	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW135	0021_MW135_241026	26 Oct 2024	ES2435541	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW135	0021_MW135_250404	04 Apr 2025	ES2510113	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW135	0021_MW135_251022	22 Oct 2025	ES2533521	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Lakes	Pathway	0021_MW136	LM_MW03B_190530	30 May 2019	ES1916831	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW136	0021_MW136_211021	21 Oct 2021	ES2138639	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW136	0021_MW136_220406	06 Apr 2022	ES2212442	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005



Appendix B
Table B5e(ii)
Historical Water Analytical Results - Lakes Groundwater

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS		PFAS - Perfluoroalkyl Carboxylic Acids									
	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTriDA)	Perfluoroundecanoic acid (PFUnDA)
	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	0.001	0.0005	0.002	0.0005	0.0005	0.0004	0.0004	0.0005	0.0005	0.0005	0.0005	0.0005
0020_0021_Human health consumption of biota												
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%												
PFAS NEMP 3.0 2025 Recreational water quality												

Catchment	SPR	Location	Field ID	Date	Lab Report No.												
Lakes	Pathway	0021_MW136	0021_MW136_221010	10 Oct 2022	ES2237106	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW136	0021_MW136_230418	18 Apr 2023	ES2313364	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW136	0021_MW136_231017	17 Oct 2023	ES2336398	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW136	0021_MW136_240409	09 Apr 2024	ES2411994	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW136	0021_MW136_241026	26 Oct 2024	ES2435541	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW136	0021_QC120_241026	26 Oct 2024	ES2435541	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW136	0021_QC220_241026	26 Oct 2024	ES2435541	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW136	0021_MW136_250404	04 Apr 2025	ES2510113	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW136	0021_MW136_251022	22 Oct 2025	ES2533521	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Lakes	Pathway	0021_MW136	0021_QC141_251022	22 Oct 2025	ES2533538	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Lakes	Pathway	0021_MW136	0021_QC241_251022	22 Oct 2025	1285374	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Lakes	Pathway	0021_MW137	0021_QC201_190530	30 May 2019	660059	-	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW137	LM_MW03C_190530	30 May 2019	ES1916831	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW137	0021_MW137_211021	21 Oct 2021	ES2138639	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW137	0021_QC212_211021	21 Oct 2021	281322	-	<0.001	<0.02	<0.002	<0.005	<0.0004	<0.0004	<0.001	<0.002	<0.05	<0.01	<0.002
Lakes	Pathway	0021_MW137	0021_MW137_220406	06 Apr 2022	ES2212442	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW137	0021_MW137_221010	10 Oct 2022	ES2237106	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW137	0021_MW137_230418	18 Apr 2023	ES2313364	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW137	0021_MW137_231017	17 Oct 2023	ES2336398	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW137	0021_MW137_240409	09 Apr 2024	ES2411994	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW137	0021_MW137_241026	26 Oct 2024	ES2435541	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW137	0021_MW137_250404	04 Apr 2025	ES2510113	-	0.0007	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW137	0021_MW137_251022	22 Oct 2025	ES2533521	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Lakes	Pathway	0021_MW138	LW_MW02A_190530	30 May 2019	ES1916831	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW138	0021_MW138_211021	21 Oct 2021	ES2138639	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Lakes	Pathway	0021_MW138	0021_MW138_220405	05 Apr 2022	ES2212442	-	<0.0005	<0.0020	<0.0005	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW138	0021_QC200_220405	05 Apr 2022	293031	-	<0.001	<0.002	<0.002	<0.005	0.001	<0.0004	<0.001	<0.002	<0.05	<0.01	<0.002
Lakes	Pathway	0021_MW138	0021_MW138_221010	10 Oct 2022	ES2237106	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW138	0021_QC200_221010	10 Oct 2022	308187	-	<0.01	<0.02	<0.02	<0.05	<0.01	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02
Lakes	Pathway	0021_MW138	0021_MW138_230418	18 Apr 2023	ES2313364	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW138	0021_MW138_231017	17 Oct 2023	ES2336398	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW138	0021_MW138_240409	09 Apr 2024	ES2411994	-	<0.0005	<0.0020	<0.0005	<0.0005	0.0006	0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW138	0021_MW138_241026	26 Oct 2024	ES2435541	-	<0.0005	0.003	<0.0005	<0.0005	0.0036	0.0176	<0.0005	0.0070	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW138	0021_MW138_250403	03 Apr 2025	ES2510113	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW138	0021_MW138_251021	21 Oct 2025	ES2533521	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Lakes	Pathway	0021_MW139	LW_MW02B_190530	30 May 2019	ES1916831	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW139	0021_MW139_211021	21 Oct 2021	ES2138639	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Lakes	Pathway	0021_MW139	0021_MW139_220405	05 Apr 2022	ES2212442	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW139	0021_QC100_220405	05 Apr 2022	ES2212442	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW139	0021_MW139_221010	10 Oct 2022	ES2237106	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW139	0021_MW139_230418	18 Apr 2023	ES2313364	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW139	0021_QC100_230418	18 Apr 2023	ES2313364	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW139	0021_QC200_230418	18 Apr 2023	321517	-	<0.001	<0.002	<0.002	<0.005	<0.0004	<0.0004	<0.001	<0.002	<0.05	<0.01	<0.002
Lakes	Pathway	0021_MW139	0021_MW139_231017	17 Oct 2023	ES2336398	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	0.0011	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005



Appendix B
Table B5e(ii)
Historical Water Analytical Results - Lakes Groundwater

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Carboxylic Acids											
	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnDA)
	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	0.001	0.0005	0.002	0.0005	0.0005	0.0004	0.0004	0.0005	0.0005	0.0005	0.0005	0.0005
0020_0021_Human health consumption of biota												
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%												
PFAS NEMP 3.0 2025 Recreational water quality												

Catchment	SPR	Location	Field ID	Date	Lab Report No.												
Lakes	Pathway	0021_MW139	0021_MW139_240409	09 Apr 2024	ES2411994	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW139	0021_QC100_240409	09 Apr 2024	ES2411994	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW139	0021_QC200_240409	09 Apr 2024	348825	-	<0.001	<0.002	<0.002	<0.005	<0.0004	<0.0004	<0.001	<0.002	<0.05	<0.01	<0.002
Lakes	Pathway	0021_MW139	0021_MW139_241026	26 Oct 2024	ES2435541	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW139	0021_MW139_250403	03 Apr 2025	ES2510113	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW139	0021_QC108_250403	03 Apr 2025	ES2510113	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW139	0021_QC208_250403	03 Apr 2025	1210052	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW139	0021_MW139_251021	21 Oct 2025	ES2533521	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Lakes	Pathway	0021_MW140	LW_MW02C_190530	30 May 2019	ES1916831	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW140	0021_MW140_211021	21 Oct 2021	ES2138639	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Lakes	Pathway	0021_MW140	0021_MW140_220405	05 Apr 2022	ES2212442	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW140	0021_MW140_221010	10 Oct 2022	ES2237106	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW140	0021_MW140_230418	18 Apr 2023	ES2313364	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW140	0021_MW140_231017	17 Oct 2023	ES2336398	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW140	0021_MW140_240409	09 Apr 2024	ES2411994	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW140	0021_MW140_241026	26 Oct 2024	ES2435541	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW140	0021_MW140_250403	03 Apr 2025	ES2510113	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Lakes	Pathway	0021_MW140	0021_MW140_251021	21 Oct 2025	ES2533521	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02

Statistics

Number of Results	2	106	106	106	106	106	106	106	106	106	106	106
Number of Detects	0	1	1	0	0	4	7	0	1	0	0	0
Minimum Concentration	<0.001	<0.0005	<0.002	<0.0005	<0.0005	<0.0004	<0.0004	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Minimum Detect	ND	0.0007	0.003	ND	ND	0.0006	0.0006	ND	0.007	ND	ND	ND
Maximum Concentration	<0.01	<0.02	<0.1	<0.02	<0.05	<0.02	<0.02	<0.02	<0.02	<0.5	<0.1	<0.02
Maximum Detect	ND	0.0007	0.003	ND	ND	0.0036	0.0176	ND	0.007	ND	ND	ND
Average Concentration *	0.0028	0.0017	0.0084	0.0018	0.002	0.0018	0.0019	0.0017	0.0019	0.0073	0.0024	0.0018
Geometric Average *	0.0016	0.00047	0.002	0.00049	0.00051	0.00047	0.0005	0.00047	0.0005	0.00066	0.00053	0.00049
Median Concentration *	0.00275	0.00025	0.001	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025
Standard Deviation *	0.0032	0.0034	0.017	0.0035	0.0041	0.0034	0.0038	0.0034	0.0035	0.026	0.0058	0.0035
Geometric Standard Deviation *	5.1	3.8	4.1	3.8	4.1	3.8	4	3.8	3.9	6.7	4.3	3.8
95% UCL (Student's-t) *	0.017	0.00229	0.0112	0.00237	0.00268	0.00232	0.00253	0.00229	0.00244	0.0115	0.00331	0.00237
Number of Env Standard Exceedances	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
% of Detects	0	1	1	0	0	4	7	0	1	0	0	0
% of Non-Detects	100	99	99	100	100	96	93	100	99	100	100	100
% of Detects at or above Env Standards	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

* A Non Detect Multiplier of 0.5 has been applied.



Appendix B
Table B5e(ii)
Historical Water Analytical Results - Lakes Groundwater

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
	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
EQL	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.0004	0.0004	0.001
0020_0021_Human health consumption of biota											
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%											
PFAS NEMP 3.0 2025 Recreational water quality											

Catchment	SPR	Location	Field ID	Date	Lab Report No.											
Lakes	Pathway	0021_MW129	LM_MW02_180413	13 Apr 2018	ES1810721	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW129	LM_MW02_PRE_180413	13 Apr 2018	ES1810721	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW129	LM_MW02_180503	03 May 2018	ES1812871	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Lakes	Pathway	0021_MW129	LM_MW02_190213	13 Feb 2019	ES1905115	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	0.003	<0.001	<0.001
Lakes	Pathway	0021_MW129	LM_MW02_190531	31 May 2019	ES1916831	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	0.029	<0.001	<0.001
Lakes	Pathway	0021_MW129	0021_MW129_211022	22 Oct 2021	ES2138639	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	0.005	<0.001	<0.001
Lakes	Pathway	0021_MW129	0021_MW129_220406	06 Apr 2022	ES2212442	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	0.002	<0.001	<0.001
Lakes	Pathway	0021_MW129	0021_MW129_221010	10 Oct 2022	ES2237106	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW129	0021_MW129_230418	18 Apr 2023	ES2313364	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW129	0021_MW129_231017	17 Oct 2023	ES2336398	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW129	0021_MW129_240409	09 Apr 2024	ES2411994	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW129	0021_MW129_241026	26 Oct 2024	ES2435541	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW129	0021_MW129_250404	04 Apr 2025	ES2510113	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW129	0021_MW129_251021	21 Oct 2025	ES2533521	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Lakes	Pathway	0021_MW130	LW_MW01_180412	12 Apr 2018	ES1810721	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW130	LW_MW01_180515	15 May 2018	ES1814324	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Lakes	Pathway	0021_MW130	LW_MW01_190213	13 Feb 2019	ES1905115	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	0.002	<0.001	<0.001
Lakes	Pathway	0021_MW130	LW_MW01_190530	30 May 2019	ES1916831	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	0.004	<0.001	<0.001
Lakes	Pathway	0021_MW130	0021_MW130_211021	21 Oct 2021	ES2138639	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	0.07	<0.05	<0.05
Lakes	Pathway	0021_MW130	0021_MW130_220406	06 Apr 2022	ES2212442	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	0.002	<0.001	<0.001
Lakes	Pathway	0021_MW130	0021_QC105_220406	06 Apr 2022	ES2212442	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	0.002	<0.001	<0.001
Lakes	Pathway	0021_MW130	0021_MW130_221010	10 Oct 2022	ES2237106	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW130	0021_MW130_230418	18 Apr 2023	ES2313364	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW130	0021_MW130_231017	17 Oct 2023	ES2336398	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW130	0021_MW130_240409	09 Apr 2024	ES2411994	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW130	0021_MW130_241026	26 Oct 2024	ES2435541	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW130	0021_MW130_250404	04 Apr 2025	ES2510113	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW130	0021_MW130_251021	21 Oct 2025	ES2533521	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Lakes	Pathway	0021_MW135	LM_MW03A_190530	30 May 2019	ES1916831	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW135	0021_MW135_211021	21 Oct 2021	ES2138639	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	0.014	<0.001	<0.001
Lakes	Pathway	0021_MW135	0021_QC112_211021	21 Oct 2021	ES2138639	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	0.014	<0.001	<0.001
Lakes	Pathway	0021_MW135	0021_MW135_220406	06 Apr 2022	ES2212442	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	0.005	<0.001	<0.001
Lakes	Pathway	0021_MW135	0021_MW135_221010	10 Oct 2022	ES2237106	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW135	0021_MW135_230418	18 Apr 2023	ES2313364	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW135	0021_MW135_231017	17 Oct 2023	ES2336398	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW135	0021_QC103_231017	17 Oct 2023	ES2336399	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW135	0021_QC203_231017	17 Oct 2023	335876	<0.1	<0.002	<0.5	<0.05	<0.002	<0.05	<0.01	<0.001	0.0005	<0.0004	<0.002
Lakes	Pathway	0021_MW135	0021_MW135_240409	09 Apr 2024	ES2411994	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.0009	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW135	0021_MW135_241026	26 Oct 2024	ES2435541	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW135	0021_MW135_250404	04 Apr 2025	ES2510113	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	0.016	<0.001	<0.001
Lakes	Pathway	0021_MW135	0021_MW135_251022	22 Oct 2025	ES2533521	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Lakes	Pathway	0021_MW136	LM_MW03B_190530	30 May 2019	ES1916831	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW136	0021_MW136_211021	21 Oct 2021	ES2138639	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW136	0021_MW136_220406	06 Apr 2022	ES2212442	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	0.012	<0.001	<0.001



Appendix B
Table B5e(ii)
Historical Water Analytical Results - Lakes Groundwater

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
	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)
EQL	µg/L 0.001	µg/L 0.0005	µg/L 0.001	µg/L 0.001	µg/L 0.0005	µg/L 0.001	µg/L 0.0005	µg/L 0.001	µg/L 0.0004	µg/L 0.0004	µg/L 0.001
0020_0021_Human health consumption of biota											
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%											
PFAS NEMP 3.0 2025 Recreational water quality											

Catchment	SPR	Location	Field ID	Date	Lab Report No.											
Lakes	Pathway	0021_MW136	0021_MW136_221010	10 Oct 2022	ES2237106	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW136	0021_MW136_230418	18 Apr 2023	ES2313364	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW136	0021_MW136_231017	17 Oct 2023	ES2336398	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW136	0021_MW136_240409	09 Apr 2024	ES2411994	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW136	0021_MW136_241026	26 Oct 2024	ES2435541	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW136	0021_QC120_241026	26 Oct 2024	ES2435541	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW136	0021_QC220_241026	26 Oct 2024	ES2435541	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW136	0021_MW136_250404	04 Apr 2025	ES2510113	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW136	0021_MW136_251022	22 Oct 2025	ES2533521	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Lakes	Pathway	0021_MW136	0021_QC141_251022	22 Oct 2025	ES2533538	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Lakes	Pathway	0021_MW136	0021_QC241_251022	22 Oct 2025	1285374	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Lakes	Pathway	0021_MW137	0021_QC201_190530	30 May 2019	660059	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.001	<0.001
Lakes	Pathway	0021_MW137	LM_MW03C_190530	30 May 2019	ES1916831	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW137	0021_MW137_211021	21 Oct 2021	ES2138639	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW137	0021_QC212_211021	21 Oct 2021	281322	<0.01	<0.002	<0.05	<0.005	<0.002	<0.005	<0.01	<0.001	<0.0004	<0.0004	<0.002
Lakes	Pathway	0021_MW137	0021_MW137_220406	06 Apr 2022	ES2212442	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW137	0021_MW137_221010	10 Oct 2022	ES2237106	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW137	0021_MW137_230418	18 Apr 2023	ES2313364	<0.001	0.0012	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW137	0021_MW137_231017	17 Oct 2023	ES2336398	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW137	0021_MW137_240409	09 Apr 2024	ES2411994	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW137	0021_MW137_241026	26 Oct 2024	ES2435541	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW137	0021_MW137_250404	04 Apr 2025	ES2510113	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW137	0021_MW137_251022	22 Oct 2025	ES2533521	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Lakes	Pathway	0021_MW138	LW_MW02A_190530	30 May 2019	ES1916831	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW138	0021_MW138_211021	21 Oct 2021	ES2138639	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Lakes	Pathway	0021_MW138	0021_MW138_220405	05 Apr 2022	ES2212442	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	0.021	<0.001	<0.001
Lakes	Pathway	0021_MW138	0021_QC200_220405	05 Apr 2022	293031	<0.01	<0.002	<0.05	<0.005	<0.002	<0.005	<0.01	<0.001	0.037	<0.0004	<0.002
Lakes	Pathway	0021_MW138	0021_MW138_221010	10 Oct 2022	ES2237106	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	0.011	<0.001	<0.001
Lakes	Pathway	0021_MW138	0021_QC200_221010	10 Oct 2022	308187	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	0.03	<0.02	<0.02
Lakes	Pathway	0021_MW138	0021_MW138_230418	18 Apr 2023	ES2313364	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	0.014	<0.001	<0.001
Lakes	Pathway	0021_MW138	0021_MW138_231017	17 Oct 2023	ES2336398	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	0.012	<0.001	<0.001
Lakes	Pathway	0021_MW138	0021_MW138_240409	09 Apr 2024	ES2411994	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	0.010	<0.001	<0.001
Lakes	Pathway	0021_MW138	0021_MW138_241026	26 Oct 2024	ES2435541	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	0.028	<0.001	<0.001
Lakes	Pathway	0021_MW138	0021_MW138_250403	03 Apr 2025	ES2510113	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	0.009	<0.001	<0.001
Lakes	Pathway	0021_MW138	0021_MW138_251021	21 Oct 2025	ES2533521	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Lakes	Pathway	0021_MW139	LW_MW02B_190530	30 May 2019	ES1916831	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW139	0021_MW139_211021	21 Oct 2021	ES2138639	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Lakes	Pathway	0021_MW139	0021_MW139_220405	05 Apr 2022	ES2212442	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW139	0021_QC100_220405	05 Apr 2022	ES2212442	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW139	0021_MW139_221010	10 Oct 2022	ES2237106	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW139	0021_MW139_230418	18 Apr 2023	ES2313364	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW139	0021_QC100_230418	18 Apr 2023	ES2313364	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW139	0021_QC200_230418	18 Apr 2023	321517	<0.1	<0.002	<0.5	<0.05	<0.002	<0.05	<0.01	<0.001	<0.0004	<0.0004	<0.002
Lakes	Pathway	0021_MW139	0021_MW139_231017	17 Oct 2023	ES2336398	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001



Appendix B
Table B5e(ii)
Historical Water Analytical Results - Lakes Groundwater

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
	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
EQL	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.0004	0.0004	0.001
0020_0021_Human health consumption of biota											
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%											
PFAS NEMP 3.0 2025 Recreational water quality											

Catchment	SPR	Location	Field ID	Date	Lab Report No.											
Lakes	Pathway	0021_MW139	0021_MW139_240409	09 Apr 2024	ES2411994	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW139	0021_QC100_240409	09 Apr 2024	ES2411994	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW139	0021_QC200_240409	09 Apr 2024	348825	<0.1	<0.002	<0.5	<0.05	<0.002	<0.05	<0.01	<0.001	<0.0004	<0.0004	<0.002
Lakes	Pathway	0021_MW139	0021_MW139_241026	26 Oct 2024	ES2435541	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW139	0021_MW139_250403	03 Apr 2025	ES2510113	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW139	0021_QC108_250403	03 Apr 2025	ES2510113	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW139	0021_QC208_250403	03 Apr 2025	1210052	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.001	<0.001
Lakes	Pathway	0021_MW139	0021_MW139_251021	21 Oct 2025	ES2533521	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Lakes	Pathway	0021_MW140	LW_MW02C_190530	30 May 2019	ES1916831	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW140	0021_MW140_211021	21 Oct 2021	ES2138639	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Lakes	Pathway	0021_MW140	0021_MW140_220405	05 Apr 2022	ES2212442	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW140	0021_MW140_221010	10 Oct 2022	ES2237106	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW140	0021_MW140_230418	18 Apr 2023	ES2313364	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW140	0021_MW140_231017	17 Oct 2023	ES2336398	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW140	0021_MW140_240409	09 Apr 2024	ES2411994	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW140	0021_MW140_241026	26 Oct 2024	ES2435541	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW140	0021_MW140_250403	03 Apr 2025	ES2510113	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Lakes	Pathway	0021_MW140	0021_MW140_251021	21 Oct 2025	ES2533521	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05

Statistics												
Number of Results	106	106	106	106	106	106	106	106	106	106	106	106
Number of Detects	0	1	0	0	0	0	0	1	0	24	0	0
Minimum Concentration	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.0005	<0.0004	<0.0004	<0.001
Minimum Detect	ND	0.0012	ND	ND	ND	ND	ND	0.0009	ND	0.0005	ND	ND
Maximum Concentration	<0.1	<0.05	<0.5	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	0.07	<0.05	<0.05
Maximum Detect	ND	0.0012	ND	ND	ND	ND	ND	0.0009	ND	0.07	ND	ND
Average Concentration *	0.0062	0.002	0.014	0.0052	0.002	0.0052	0.0026	0.0041	0.0072	0.0041	0.0041	0.0041
Geometric Average *	0.0012	0.00052	0.0013	0.0011	0.00051	0.0011	0.00056	0.00091	0.0017	0.00088	0.00094	0.00094
Median Concentration *	0.0005	0.00025	0.0005	0.0005	0.00025	0.0005	0.00025	0.0005	0.0005	0.0005	0.0005	0.0005
Standard Deviation *	0.012	0.0041	0.048	0.0096	0.0042	0.0096	0.0062	0.0086	0.012	0.0086	0.0086	0.0086
Geometric Standard Deviation *	5	4.1	6.1	4.7	4.1	4.7	4.5	4	5.6	4.2	4	4
95% UCL (Student's-t) *	0.00818	0.00271	0.0218	0.00675	0.0027	0.00675	0.00361	0.00543	0.00911	0.00547	0.00551	0.00551
Number of Env Standard Exceedances	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
% of Detects	0	1	0	0	0	0	1	0	23	0	0	0
% of Non-Detects	100	99	100	100	100	100	99	100	77	100	100	100
% of Detects at or above Env Standards	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

* A Non Detect Multiplier of 0.5 has been applied.



Appendix B
Table B5f
Historical Water Analytical Results - Mary Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids					
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	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)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)
	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	0.0001	0.0005	0.0005	0.0003	0.0003	0.001	0.0003	0.001	0.0005	0.0005	0.01	0.0005	0.001	0.0005
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13		220											
PFAS NEMP 3.0 2025 Recreational water quality	2	2	10				2							

Catchment	SPR	Location	Field ID	Date	Lab Report No.														
Mary Creek	Source	0021_MW061	0021_MW061_210621	21 Jun 2021	ES2123994	5.51	3.36	0.16	10.5	10.0	-	8.87	-	0.18	<0.02	-	0.16	-	0.29
Mary Creek	Source	0021_MW061	0021_QC211_210623	23 Jun 2021	807414	4.7	3.6	0.19	10.03	9.59	4.89	8.3	8.49	0.18	<0.01	-	0.15	0.06	0.23
Mary Creek	Source	0021_MW061	0021_MW061_240411	11 Apr 2024	ES2411994	5.23	1.75	0.11	7.88	7.59	-	6.98	-	0.08	<0.02	-	0.12	-	0.12
Mary Creek	Source	0021_MW061	0021_MW061_241024	24 Oct 2024	ES2435541	5.25	1.34	0.09	7.37	7.17	-	6.59	-	0.10	<0.02	-	0.10	-	0.07
Mary Creek	Source	0021_MW061	0021_MW061_250424	24 Apr 2025	ES2512435	0.07	0.03	<0.01	0.10	0.10	-	0.10	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_MW061	0021_MW061_251023	23 Oct 2025	ES2533521	4.29	1.52	0.09	6.66	6.41	-	5.81	-	0.08	<0.02	-	0.09	-	0.11
Mary Creek	Source	0021_MW063	0021_MW063_210622	22 Jun 2021	ES2123994	0.84	0.75	0.03	1.83	1.72	-	1.59	-	0.04	<0.02	-	0.04	-	0.07
Mary Creek	Source	0021_MW063	0021_MW063_211122	22 Nov 2021	ES2142514	0.96	0.87	0.04	2.16	2.03	-	1.83	-	0.06	<0.02	-	0.05	-	0.08
Mary Creek	Source	0021_MW063	0021_QC201_211122	22 Nov 2021	845848	0.70 ^{#1}	0.65 ^{#1}	0.04 ^{#1}	1.63	1.52	0.74	1.35	1.39	0.05	<0.01	-	0.05 ^{#1}	0.01	0.05 ^{#1}
Mary Creek	Source	0021_MW063	0021_MW063_241025	25 Oct 2024	ES2435541	0.16	0.04	<0.01	0.20	0.20	-	0.20	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_MW063	0021_QC159_241025	25 Oct 2024	ES2435541	1.18	0.81	0.04	2.26	2.13	-	1.99	-	0.04	<0.02	-	0.05	-	0.08
Mary Creek	Source	0021_MW063	0021_QC259_241025	25 Oct 2024	1156160	1.7	0.89	0.04	2.92	2.81	1.74	2.59	2.63	0.04	<0.01	<0.01	0.05	0.01	0.05
Mary Creek	Source	0021_MW063	0021_MW063_250129	29 Jan 2025	ES2503552	1.69	1.02	0.05	3.09	2.92	-	2.71	-	0.05	<0.02	<0.02	0.07	<0.02	0.10
Mary Creek	Source	0021_MW063	0021_MW063_250403	03 Apr 2025	ES2510113	1.57	1.08	0.05	3.02	2.86	-	2.65	-	0.06	<0.02	-	0.07	-	0.09
Mary Creek	Source	0021_MW063	0021_MW063_251022	22 Oct 2025	ES2533521	2.30	1.03	0.06	3.68	3.53	-	3.33	-	0.05	<0.02	-	0.07	-	0.08
Mary Creek	Source	0021_MW064	0021_MW064_210622	22 Jun 2021	ES2123994	9.01	8.80	0.52	23.7	22.1	-	17.8	-	0.86	<0.02	-	0.46	-	1.12
Mary Creek	Source	0021_MW064	0021_QC212_210623	23 Jun 2021	807414	12	10	0.68	28.83	26.87	12.68	22	22.68	0.99	<0.01	-	0.48	0.61	0.86
Mary Creek	Source	0021_MW064	0021_MW064_211122	22 Nov 2021	ES2142514	0.23	0.91	0.02	2.14	1.88	-	1.14	-	0.32	<0.02	-	<0.02	-	0.26
Mary Creek	Source	0021_MW064	0021_QC101_211122	22 Nov 2021	ES2142514	0.25	0.89	0.02	2.11	1.85	-	1.14	-	0.30	<0.02	-	<0.02	-	0.26
Mary Creek	Source	0021_MW064	0021_MW064_241025	25 Oct 2024	ES2435541	0.29	0.42	0.01	1.26	1.10	-	0.71	-	0.14	<0.02	-	<0.02	-	0.09
Mary Creek	Source	0021_MW064	0021_MW064_250403	03 Apr 2025	ES2510113	0.18	0.47	<0.01	1.13	0.95	-	0.65	-	0.13	<0.02	-	<0.02	-	0.14
Mary Creek	Source	0021_MW064	0021_MW064_251022	22 Oct 2025	ES2533521	0.28	0.32	<0.01	0.89	0.74	-	0.60	-	0.08	<0.02	-	<0.02	-	0.10
Mary Creek	Source	0021_MW064	0021_QC165_251022	22 Oct 2025	ES2533538	0.28	0.36	0.01	0.96	0.81	-	0.64	-	0.10	<0.02	-	<0.02	-	0.10
Mary Creek	Source	0021_MW064	0021_QC265_251022	22 Oct 2025	1285374	0.30 ^{#1}	0.33 ^{#1}	<0.01	0.9	0.8	-	0.63	-	0.09	<0.01	<0.01	<0.01	0.04	0.08 ^{#1}
Mary Creek	Source	0021_MW065	0021_MW065_210622	22 Jun 2021	ES2123994	4.80	4.21	0.20	11.6	10.9	-	9.01	-	0.44	<0.02	-	0.21	-	0.44
Mary Creek	Source	0021_MW065	0021_MW065_211122	22 Nov 2021	ES2142514	0.54	0.47	0.02	1.56	1.50	-	1.01	-	0.09	<0.02	-	<0.02	-	0.06
Mary Creek	Source	0021_MW065	0021_MW065_241024	24 Oct 2024	ES2435541	0.15	0.18	<0.01	0.52	0.48	-	0.33	-	0.04	<0.02	-	<0.02	-	0.04
Mary Creek	Source	0021_MW065	0021_MW065_250129	29 Jan 2025	ES2503552	0.11	0.66	0.03	1.86	1.65	-	0.77	-	0.20	<0.02	<0.02	<0.02	0.07	0.14
Mary Creek	Source	0021_MW065	0021_MW065_250403	03 Apr 2025	ES2510113	0.36	0.45	0.03	1.32	1.24	-	0.81	-	0.08	<0.02	-	<0.02	-	0.06
Mary Creek	Source	0021_MW065	0021_MW065_251022	22 Oct 2025	ES2533521	0.25	0.32	0.02	0.89	0.84	-	0.57	-	0.04	<0.02	-	<0.02	-	0.05
Mary Creek	Source	0021_MW101	A_MW01	28 Apr 2017	ES1710200	0.0440	0.277	0.0048	0.386	0.368	-	0.321	-	0.0116	<0.0005	-	0.0040	-	0.0135
Mary Creek	Source	0021_MW101	0021_MW101_200909	09 Sep 2020	ES2031960	0.208	0.156	0.0030	0.412	0.392	-	0.364	-	0.0035	<0.0005	-	0.0122	-	0.0073
Mary Creek	Source	0021_MW101	0021_MW101_211019	19 Oct 2021	ES2138639	0.18	0.11	<0.01	0.29	0.29	-	0.29	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_MW101	0021_MW101_220405	05 Apr 2022	ES2212442	0.22	0.12	<0.01	0.34	0.34	-	0.34	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_MW101	0021_MW101_221013	13 Oct 2022	ES2237106	0.32	0.18	<0.01	0.50	0.50	-	0.50	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_MW101	0021_MW101_230420	20 Apr 2023	ES2313364	0.39	0.20	<0.01	0.59	0.59	-	0.59	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_MW101	0021_MW101_231019	19 Oct 2023	ES2336398	0.09	0.08	<0.01	0.17	0.17	-	0.17	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_MW101	0021_MW101_240410	10 Apr 2024	ES2411994	0.20	0.13	<0.01	0.33	0.33	-	0.33	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_MW101	0021_MW101_241024	24 Oct 2024	ES2435541	0.28	0.09	<0.01	0.37	0.37	-	0.37	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_MW101	0021_MW101_250404	04 Apr 2025	ES2510113	0.28	0.07	<0.01	0.35	0.35	-	0.35	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_MW101	0021_MW101_251023	23 Oct 2025	ES2533521	0.18	0.13	<0.01	0.31	0.31	-	0.31	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_MW103	A_MW03	28 Apr 2017	ES1710200	22.1	37.5	1.92	80.3	74.1	-	59.6	-	4.06	<0.0200	-	1.86	-	4.37
Mary Creek	Source	0021_MW103	A_MW03_180502	02 May 2018	ES1812871	139	29.6	2.07	188	180	-	169	-	2.32	<0.02	-	3.45	-	4.60
Mary Creek	Source	0021_MW103	JBRF-A-MW03-2-200624	24 Jun 2020	727660	20 ^{#1}	3.3 ^{#1}	0.13 ^{#1}	25.83	25.16	20.13	23.3	23.43	0.26	<0.01	-	0.20 ^{#1}	0.08	0.32 ^{#1}
Mary Creek	Source	0021_MW103	0021_MW103_210622	22 Jun 2021	ES2123994	13.9	2.55	0.10	17.7	17.3	-	16.4	-	0.15	<0.02	-	0.20	-	0.20
Mary Creek	Source	0021_MW103	0021_QC114_210622	22 Jun 2021	ES2123994	16.0	3.12	0.12	20.6	20.2	-	19.1	-	0.19	<0.02	-	0.20	-	0.25
Mary Creek	Source	0021_MW103	0021_MW103_211019	19 Oct 2021	ES2138639	14.7	3.42	0.14	20.0	19.6	-	18.1	-	0.19	<0.02	-	0.21	-	0.24
Mary Creek	Source	0021_MW103	0021_MW103_211122	22 Nov 2021	ES2142514	20.0	3.59	0.23	26.1	25.5	-	23.6	-	0.26	<0.02	-	0.28	-	0.32
Mary Creek	Source	0021_MW103	0021_MW103_220406	06 Apr 2022	ES2212442	20.7	3.76	0.18	26.8	26.2	-	24.5	-	0.36	<0.02	-	0.26	-	0.38
Mary Creek	Source	0021_MW103	0021_MW103_221013	13 Oct 2022	ES2237106	26.9	2.55	0.14	30.8	30.4	-	29.4	-	0.15	<0.02	-	0.19	-	0.23
Mary Creek	Source	0021_MW103	0021_MW103_230420	20 Apr 2023	ES2313364	48.4	4.21	0.24	55.1	54.3	-	52.6	-	0.24	0.03	-	0.42	-	0.35



Appendix B
Table B5f
Historical Water Analytical Results - Mary Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids					
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	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)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)
	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	0.0001	0.0005	0.0005	0.0003	0.0003	0.001	0.0003	0.001	0.0005	0.0005	0.01	0.0005	0.001	0.0005
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13		220											
PFAS NEMP 3.0 2025 Recreational water quality	2	2	10				2							

Catchment	SPR	Location	Field ID	Date	Lab Report No.														
Mary Creek	Source	0021_MW103	0021_MW103_231018	18 Oct 2023	ES2336398	41.6	2.07	0.15	45.2	44.7	-	43.7	-	0.15	<0.02	-	0.29	-	0.15
Mary Creek	Source	0021_MW103	0021_MW103_240411	11 Apr 2024	ES2411994	36.8	3.39	0.18	42.7	41.6	-	40.2	-	0.23	0.04	-	0.41	-	0.29
Mary Creek	Source	0021_MW103	0021_MW103_241025	25 Oct 2024	ES2435541	37.3	2.06	0.14	41.1	40.4	-	39.4	-	0.17	<0.02	-	0.31	-	0.17
Mary Creek	Source	0021_MW103	0021_MW103_250403	03 Apr 2025	ES2510113	16.9	3.07	0.10	21.8	21.2	-	20.0	-	0.28	<0.02	-	0.16	-	0.32
Mary Creek	Source	0021_MW103	0021_MW103_251022	22 Oct 2025	ES2533521	50.8	50.2	2.79	132	120	-	101	-	3.86	0.03	-	3.49	-	5.96
Mary Creek	Source	0021_MW105	A_MW05	28 Apr 2017	ES1710200	26.1	3.55	0.182	30.7	30.4	-	29.6	-	0.0800	<0.0200	-	0.232	-	0.134
Mary Creek	Source	0021_MW105	0021_MW105_211019	19 Oct 2021	ES2138639	12.5	9.08	0.27	24.7	23.6	-	21.6	-	0.40	<0.02	-	0.40	-	0.70
Mary Creek	Source	0021_MW105	0021_QC200_211019	19 Oct 2021	281322	11	9.6	0.26	23	-	11	20	-	0.43	<0.02	-	0.46	-	0.68
Mary Creek	Source	0021_MW105	0021_MW105_220406	06 Apr 2022	ES2212442	13.9	9.59	0.40	27.9	26.6	-	23.5	-	0.55	<0.02	-	0.52	-	0.75
Mary Creek	Source	0021_MW105	0021_MW105_221013	13 Oct 2022	ES2237106	29.2	7.64	0.40	38.9	38.2	-	36.8	-	0.09	<0.02	-	0.54	-	0.18
Mary Creek	Source	0021_MW105	0021_MW105_230420	20 Apr 2023	ES2313364	24.4	8.80	0.39	36.4	35.2	-	33.2	-	0.38	<0.02	-	0.59	-	0.59
Mary Creek	Source	0021_MW105	0021_MW105_231019	19 Oct 2023	ES2336398	7.66	4.63	0.16	14.1	13.4	-	12.3	-	0.34	<0.02	-	0.26	-	0.37
Mary Creek	Source	0021_MW105	0021_MW105_240411	11 Apr 2024	ES2411994	11.0	6.83	0.24	21.3	19.8	-	17.8	-	0.70	0.04	-	0.29	-	0.80
Mary Creek	Source	0021_MW105	0021_MW105_241022	22 Oct 2024	ES2435078	22.0	3.58	0.17	27.2	26.6	-	25.6	-	0.09	<0.02	-	0.25	-	0.20
Mary Creek	Source	0021_MW105	0021_MW105_250129	29 Jan 2025	ES2503552	16.5	6.25	0.14	24.1	23.5	-	22.8	-	0.07	<0.02	0.13	0.23	0.02	0.24
Mary Creek	Source	0021_MW105	0021_MW105_250403	03 Apr 2025	ES2510113	16.0	3.43	0.09	20.5	19.9	-	19.4	-	0.07	<0.02	-	0.17	-	0.16
Mary Creek	Source	0021_MW105	0021_QC256_250403	03 Apr 2025	1210052	21	4.2	0.09	26.33	25.67	21.09	25.2	25.29	<0.2	<0.01	0.27	0.24	0.02	0.13
Mary Creek	Source	0021_MW105	0021_MW105_251023	23 Oct 2025	ES2533521	18.0	3.60	0.16	23.3	22.6	-	21.6	-	0.08	<0.02	-	0.20	-	0.19
Mary Creek	Source	0021_MW105	A_MW06	27 Apr 2017	ES1710200	90.5	29.1	3.44	134	128	-	120	-	0.498	<0.0200	-	5.37	-	0.978
Mary Creek	Source	0021_MW106	JBRF-A-MW06-2-200624	24 Jun 2020	727660	160 ^{#1}	62 ^{#1}	5.3 ^{#1}	255.42	244.26	165.3	222	227.3	2.1	0.55 ^{#1}	-	5.9 ^{#1}	0.61	3.7 ^{#1}
Mary Creek	Source	0021_MW106	0021_MW106_200909	09 Sep 2020	ES2031960	96.3	45.9	3.58	169	159	-	142	-	1.00	0.107	-	6.01	-	3.65
Mary Creek	Source	0021_MW106	0021_QC123_200909	09 Sep 2020	ES2031960	106	50.6	3.28	184	173	-	157	-	1.20	0.143	-	6.37	-	3.86
Mary Creek	Source	0021_MW106	0021_MW106_211019	19 Oct 2021	ES2138639	177	31.2	1.60	222	217	-	208	-	0.70	0.09	-	2.22	-	2.23
Mary Creek	Source	0021_MW106	0021_MW106_220405	05 Apr 2022	ES2212442	61.1	21.8	1.08	93.5	89.3	-	82.9	-	0.70	0.08	-	2.36	-	1.70
Mary Creek	Source	0021_MW106	0021_QC104_220405	05 Apr 2022	ES2212442	105	34.8	1.62	157	150	-	140	-	0.84	0.08	-	5.15	-	1.50
Mary Creek	Source	0021_MW106	0021_MW106_221013	13 Oct 2022	ES2237106	186	60.0	2.65	264	258	-	246	-	0.75	0.06	-	3.76	-	2.97
Mary Creek	Source	0021_MW106	0021_QC210_221013	13 Oct 2022	308187	130	48	2.7	200	-	140	180	-	0.90	0.03	-	4.0	-	1.8
Mary Creek	Source	0021_MW106	0021_MW106_230420	20 Apr 2023	ES2313364	322	103	5.91	466	452	-	425	-	1.76	0.18	-	9.50	-	4.64
Mary Creek	Source	0021_MW106	0021_MW106_231019	19 Oct 2023	ES2336398	182	64.0	4.48	274	266	-	246	-	1.23	0.03	-	5.62	-	2.82
Mary Creek	Source	0021_MW106	0021_MW106_240410	10 Apr 2024	ES2411994	78.2	19.8	0.97	109	105	-	98.0	-	0.64	0.19	-	1.34	-	1.41
Mary Creek	Source	0021_MW106	0021_MW106_241024	24 Oct 2024	ES2435541	134	61.3	4.33	220	212	-	195	-	1.08	0.07	-	5.05	-	2.33
Mary Creek	Source	0021_MW106	0021_MW106_250129	29 Jan 2025	ES2503552	151	33.4	2.35	200	194	-	184	-	0.72	<0.02	0.58	3.53	0.16	2.15
Mary Creek	Source	0021_MW106	0021_MW106_250404	04 Apr 2025	ES2510113	62.8	17.6	0.83	88.9	85.4	-	80.4	-	0.45	0.08	-	1.96	-	1.02
Mary Creek	Source	0021_MW106	0021_MW106_251022	22 Oct 2025	ES2533521	67.9	27.6	2.50	110	104	-	95.5	-	0.59	0.05	-	2.77	-	2.52
Mary Creek	Source	0021_MW107	A_MW07	08 May 2017	ES1711220	0.162	2.52	0.0516	4.89	4.48	-	2.68	-	0.343	<0.0005	-	0.0316	-	0.379
Mary Creek	Source	0021_MW107	0021_MW107_210622	22 Jun 2021	ES2123994	3.58	3.76	0.11	8.59	8.21	-	7.34	-	0.19	<0.02	-	0.13	-	0.25
Mary Creek	Source	0021_MW107	0021_MW107_211019	19 Oct 2021	ES2138639	3.93	4.28	0.14	9.90	9.42	-	8.21	-	0.21	<0.02	-	0.17	-	0.31
Mary Creek	Source	0021_MW107	0021_QC100_211019	19 Oct 2021	ES2138639	3.63	3.95	0.12	9.17	8.71	-	7.58	-	0.20	<0.02	-	0.16	-	0.30
Mary Creek	Source	0021_MW107	0021_MW107_211122	22 Nov 2021	ES2142514	2.69	2.36	0.10	6.29	6.03	-	5.05	-	0.16	<0.02	-	0.09	-	0.17
Mary Creek	Source	0021_MW107	0021_MW107_220406	06 Apr 2022	ES2212442	2.86	2.62	0.11	6.63	6.31	-	5.48	-	0.18	<0.02	-	0.12	-	0.20
Mary Creek	Source	0021_MW107	0021_MW107_221013	13 Oct 2022	ES2237106	2.72	3.05	0.13	6.84	6.54	-	5.77	-	0.13	<0.02	-	0.12	-	0.18
Mary Creek	Source	0021_MW107	0021_MW107_230420	20 Apr 2023	ES2313364	2.95	3.83	0.13	8.14	7.71	-	6.78	-	0.18	<0.02	-	0.15	-	0.28
Mary Creek	Source	0021_MW107	0021_QC110_230420	20 Apr 2023	ES2313364	2.01	2.31	0.08	5.15	4.80	-	4.32	-	0.09	<0.02	-	0.10	-	0.25
Mary Creek	Source	0021_MW107	0021_QC210_230420	20 Apr 2023	321517	2.3	3.3	0.099	6.7	-	2.4	5.6	-	0.12	<0.02	-	0.13	-	0.22
Mary Creek	Source	0021_MW107	0021_MW107_231018	18 Oct 2023	ES2336398	3.31	3.45	0.13	8.15	7.79	-	6.76	-	0.15	<0.02	-	0.14	-	0.22
Mary Creek	Source	0021_MW107	0021_MW107_240411	11 Apr 2024	ES2411994	2.42	3.18	0.10	6.87	6.44	-	5.60	-	0.17	<0.02	-	0.11	-	0.23
Mary Creek	Source	0021_MW107	0021_QC112_240411	11 Apr 2024	ES2411994	2.76	3.31	0.10	7.39	6.97	-	6.07	-	0.18	<0.02	-	0.08	-	0.26
Mary Creek	Source	0021_MW107	0021_QC212_240411	11 Apr 2024	348825	2.3	3.0	0.09	6.4	-	2.3	5.3	-	0.17	<0.02	-	0.09	-	0.21
Mary Creek	Source	0021_MW107	0021_MW107_241024	24 Oct 2024	ES2435541	2.44	4.44	0.21	8.94	8.42	-	6.88	-	0.26	<0.02	-	0.16	-	0.25
Mary Creek	Source	0021_MW107	0021_MW107_250403	03 Apr 2025	ES2510113	1.53	1.59	0.09	4.07	3.84	-	3.12	-	0.10	<0.02	-	0.07	-	0.12
Mary Creek	Source	0021_MW107	0021_QC156_250403	03 Apr 2025	ES2510113	1.86	1.42	0.11	4.19	3.98	-	3.28	-	0.09	<0.02	-	0.06	-	0.11



Appendix B
Table B5f
Historical Water Analytical Results - Mary Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids					
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	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)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)
	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	0.0001	0.0005	0.0005	0.0003	0.0003	0.001	0.0003	0.001	0.0005	0.0005	0.01	0.0005	0.001	0.0005
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13		220											
PFAS NEMP 3.0 2025 Recreational water quality	2	2	10				2							

Catchment	SPR	Location	Field ID	Date	Lab Report No.														
Mary Creek	Source	0021_MW107	0021_MW107_251023	23 Oct 2025	ES2533521	1.93	2.62	0.13	5.89	5.50	-	4.55	-	0.15	<0.02	-	0.12	-	0.21
Mary Creek	Source	0021_MW110	B_MW01	28 Apr 2017	ES1710200	0.0067	0.0581	0.0007	0.0911	0.0822	-	0.0648	-	0.0078	<0.0005	-	<0.0005	-	0.0089
Mary Creek	Source	0021_MW110	0021_MW110_210622	22 Jun 2021	ES2123994	0.06	0.15	<0.01	0.21	0.21	-	0.21	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_MW110	0021_MW110_211020	20 Oct 2021	ES2138639	0.07	0.24	<0.01	0.34	0.34	-	0.31	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_MW110	0021_MW110_211122	22 Nov 2021	ES2142514	0.02	0.11	<0.01	0.13	0.13	-	0.13	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_MW110	0021_MW110_220407	07 Apr 2022	ES2212442	0.86	0.38	0.02	1.47	1.40	-	1.24	-	0.04	<0.02	-	0.04	-	0.03
Mary Creek	Source	0021_MW110	0021_MW110_221013	13 Oct 2022	ES2237106	0.04	0.13	<0.01	0.17	0.17	-	0.17	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_MW110	0021_MW110_230420	20 Apr 2023	ES2313364	0.06	0.32	<0.01	0.42	0.42	-	0.38	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_MW110	0021_MW110_231018	18 Oct 2023	ES2336398	0.02	0.08	<0.01	0.10	0.10	-	0.10	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_MW110	0021_MW110_240410	10 Apr 2024	ES2411994	0.04	0.21	<0.01	0.25	0.25	-	0.25	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_MW110	0021_MW110_241025	25 Oct 2024	ES2435541	0.05	0.13	<0.01	0.18	0.18	-	0.18	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_MW110	0021_MW110_250130	29 Jan 2025	ES2503552	0.14	0.04	<0.01	0.18	0.18	-	0.18	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Mary Creek	Source	0021_MW110	0021_QC103_250130	30 Jan 2025	ES2503552	0.13	0.05	<0.01	0.18	0.18	-	0.18	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Mary Creek	Source	0021_MW110	0021_QC203_250130	30 Jan 2025	1187025	0.17 ^{#1}	<0.1	<0.1	<0.5	<0.5	0.17	0.17	0.17	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mary Creek	Source	0021_MW110	0021_MW110_250401	01 Apr 2025	ES2510113	<0.01	0.08	<0.01	0.08	0.08	-	0.08	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_MW110	0021_MW110_251023	23 Oct 2025	ES2533521	<0.01	0.03	<0.01	0.03	0.03	-	0.03	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_MW111	B_MW02	28 Apr 2017	ES1710200	0.0952	0.0388	0.0029	0.149	0.145	-	0.134	-	0.0029	<0.0005	-	0.0009	-	0.0037
Mary Creek	Source	0021_MW111	0021_MW111_210622	22 Jun 2021	ES2123994	0.04	0.11	<0.01	0.15	0.15	-	0.15	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_MW111	0021_MW111_211020	20 Oct 2021	ES2138639	<0.01	0.08	<0.01	0.08	0.08	-	0.08	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_MW111	0021_MW111_211122	22 Nov 2021	ES2142514	<0.01	0.08	<0.01	0.08	0.08	-	0.08	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_MW111	0021_MW111_220407	07 Apr 2022	ES2212442	<0.01	0.05	<0.01	0.05	0.05	-	0.05	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_MW111	0021_MW111_221013	13 Oct 2022	ES2237106	<0.01	0.06	<0.01	0.06	0.06	-	0.06	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_MW111	0021_MW111_230420	20 Apr 2023	ES2313364	0.01	0.06	<0.01	0.07	0.07	-	0.07	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_MW111	0021_MW111_231018	18 Oct 2023	ES2336398	0.02	0.03	<0.01	0.05	0.05	-	0.05	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_MW111	0021_MW111_240410	10 Apr 2024	ES2411994	0.02	0.02	<0.01	0.04	0.04	-	0.04	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_MW111	0021_MW111_241025	25 Oct 2024	ES2435541	0.02	0.01	<0.01	0.03	0.03	-	0.03	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_MW111	0021_MW111_250130	30 Jan 2025	ES2503552	0.18	0.06	<0.01	0.24	0.24	-	0.24	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Mary Creek	Source	0021_MW111	0021_MW111_250408	08 Apr 2025	ES2510113	0.02	0.02	<0.01	0.04	0.04	-	0.04	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_MW111	0021_MW111_251023	23 Oct 2025	ES2533521	<0.01	0.01	<0.01	0.01	0.01	-	0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_MW150	0021_MW150_200813	13 Aug 2020	ES2028499	14.2	4.76	0.206	20.4	19.7	-	19.0	-	0.108	<0.0016 ^{#2}	-	0.399	-	0.307
Mary Creek	Source	0021_MW150	0021_MW150_241025	25 Oct 2024	ES2435541	15.4	2.52	0.18	18.9	18.4	-	17.9	-	0.06	<0.02	-	0.37	-	0.11
Mary Creek	Source	0021_MW150	0021_QC158_241025	25 Oct 2024	ES2435541	11.9	2.17	0.13	14.9	14.5	-	14.1	-	0.05	<0.02	-	0.29	-	0.10
Mary Creek	Source	0021_MW150	0021_QC258_241025	25 Oct 2024	1156160	22	2.7	0.17	25.74	25.28	22.17	24.7	24.87	0.05	<0.01	<0.01	0.36	0.02	0.08
Mary Creek	Source	0021_MW150	0021_MW150_250129	29 Jan 2025	ES2503552	19.6	3.09	0.30	24.2	23.4	-	22.7	-	0.09	<0.02	<0.02	0.54	0.03	0.17
Mary Creek	Source	0021_MW150	0021_MW150_250404	04 Apr 2025	ES2510113	19.9	3.60	0.36	25.4	24.4	-	23.5	-	0.10	<0.02	-	0.70	-	0.22
Mary Creek	Source	0021_MW150	0021_MW150_251023	23 Oct 2025	ES2533521	22.2	3.48	0.32	27.4	26.6	-	25.7	-	0.12	<0.02	-	0.64	-	0.21
Mary Creek	Source	0021_MW153	0021_MW153_200812	12 Aug 2020	ES2028499	15.8	11.8	0.826	34.2	31.2	-	27.6	-	0.717	<0.0016 ^{#2}	-	1.47	-	1.54
Mary Creek	Source	0021_MW153	0021_QC115_200812	12 Aug 2020	ES2028499	17.3	11.7	0.828	35.2	32.4	-	29.0	-	0.677	<0.0016 ^{#2}	-	1.36	-	1.47
Mary Creek	Source	0021_MW153	0021_QC215_200812	12 Aug 2020	737847	14	17	0.65 ^{#1}	36.77	34.311	14.65	31	31.65	0.68	<0.001	-	1.0	0.31	1.1
Mary Creek	Source	0021_MW153	0021_MW153_241025	25 Oct 2024	ES2435541	11.6	7.14	0.54	22.3	20.8	-	18.7	-	0.38	<0.02	-	0.68	-	0.62
Mary Creek	Source	0021_MW153	0021_MW153_250129	29 Jan 2025	ES2503552	14.4	7.21	0.55	25.3	23.7	-	21.6	-	0.40	<0.02	<0.02	0.76	0.17	0.67
Mary Creek	Source	0021_MW153	0021_MW153_250404	04 Apr 2025	ES2510113	16.1	8.84	0.58	28.9	27.1	-	24.9	-	0.39	<0.02	-	0.91	-	0.70
Mary Creek	Source	0021_MW153	0021_QC140_250404	04 Apr 2025	ES2510113	18.5	6.36	0.71	28.6	27.0	-	24.9	-	0.37	<0.02	-	0.81	-	0.60
Mary Creek	Source	0021_MW153	0021_QC240_250404	04 Apr 2025	1210052	18	7.6	0.57	29.59	27.88	18.57	25.6	26.17	0.42	<0.01	0.02	0.92	0.16	0.61
Mary Creek	Source	0021_MW153	0021_MW153_251023	23 Oct 2025	ES2533521	17.9	6.12	0.59	28.1	26.3	-	24.0	-	0.42	<0.02	-	0.84	-	0.74
Mary Creek	Source	0021_SW002	AB_SW02	20 Apr 2017	ES1709644	5.61	6.40	0.120	14.0	13.6	-	12.0	-	0.514	0.0025	-	0.328	-	0.109
Mary Creek	Source	0021_SW002	0021_SW002_211019	19 Oct 2021	ES2138639	5.90	4.66	0.16	12.4	11.8	-	10.6	-	0.23	<0.02	-	0.25	-	0.43
Mary Creek	Source	0021_SW002	0021_SW002_220405	05 Apr 2022	ES2212442	2.00	1.04	0.06	3.59	3.44	-	3.04	-	0.12	<0.02	-	0.06	-	0.09
Mary Creek	Source	0021_SW002	0021_SW002_221013	13 Oct 2022	ES2237106	3.64	2.59	0.14	7.38	7.01	-	6.23	-	0.16	<0.02	-	0.14	-	0.23
Mary Creek	Source	0021_SW002	0021_SW002_230420	20 Apr 2023	ES2313364	1.17	0.70	0.05	2.32	2.22	-	1.87	-	0.05	<0.02	-	0.04	-	0.06
Mary Creek	Source	0021_SW002	0021_SW002_231018	18 Oct 2023	ES2336399	2.67	2.01	0.06	5.52	5.32	-	4.68	-	0.11	<0.02	-	0.06	-	0.14



Appendix B
Table B5f
Historical Water Analytical Results - Mary Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids					
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	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)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecane sulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)
	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	0.0001	0.0005	0.0005	0.0003	0.0003	0.001	0.0003	0.001	0.0005	0.0005	0.01	0.0005	0.001	0.0005
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13		220											
PFAS NEMP 3.0 2025 Recreational water quality	2	2	10				2							

Catchment	SPR	Location	Field ID	Date	Lab Report No.														
Mary Creek	Source	0021_SW002	0021_SW002_240411	11 Apr 2024	ES2412012	1.58	1.04	0.03	2.97	2.84	-	2.62	-	0.06	<0.02	-	0.04	-	0.09
Mary Creek	Source	0021_SW002	0021_SW002_251022	22 Oct 2025	ES2533521	2.35	1.46	0.07	4.54	4.28	-	3.81	-	0.10	<0.02	-	0.08	-	0.14
Mary Creek	Source	0021_SW003	AB_SW03	20 Apr 2017	ES1709644	0.0443	0.0416	0.0011	0.0996	0.0957	-	0.0859	-	0.0020	<0.0005	-	0.0013	-	0.0026
Mary Creek	Source	0021_SW003	0021_SW003_211019	19 Oct 2021	ES2138639	0.08	0.08	<0.01	0.16	0.16	-	0.16	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_SW003	0021_SW003_220405	05 Apr 2022	ES2212442	0.04	0.03	<0.01	0.07	0.07	-	0.07	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_SW003	0021_QC205_221013	13 Oct 2022	308187	0.04	0.03	<0.01	0.07	-	0.04	0.07	-	<0.01	<0.02	-	<0.01	-	<0.01
Mary Creek	Source	0021_SW003	0021_SW003_221013	13 Oct 2022	ES2237106	0.04	0.04	<0.01	0.08	0.08	-	0.08	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_SW003	0021_SW003_230420	20 Apr 2023	ES2313364	0.06	0.05	<0.01	0.11	0.11	-	0.11	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_SW003	0021_SW003_240411	11 Apr 2024	ES2412012	0.05	0.03	<0.01	0.08	0.08	-	0.08	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_SW003	0021_SW003_250403	03 Apr 2025	ES2510622	0.08	0.04	<0.01	0.12	0.12	-	0.12	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_SW003	0021_SW003_250526	26 May 2025	ES2516045	0.06	0.03	<0.01	0.09	0.09	-	0.09	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_SW003	0021_SW003_250704	04 Jul 2025	ES2520608	0.04	0.06	<0.01	0.13	0.13	-	0.10	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_SW003	0021_SW003_250805	05 Aug 2025	ES2524252	0.61	0.19	0.01	0.88	0.88	-	0.80	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_SW004	AB_SW04	13 Apr 2017	ES1709064	0.0168	0.0231	0.0006	0.0464	0.0434	-	0.0399	-	0.0015	<0.0005	-	0.0010	-	0.0020
Mary Creek	Source	0021_SW004	TNQA08	13 Apr 2017	ES1709064	0.0173	0.0249	0.0006	0.0488	0.0459	-	0.0422	-	0.0017	<0.0005	-	0.0010	-	0.0019
Mary Creek	Source	0021_SW004	0021_SW004_211026	26 Oct 2021	ES2138639	<0.01	0.01	<0.01	0.01	0.01	-	0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_SW004	0021_SW004_220406	06 Apr 2022	ES2212442	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_SW004	0021_SW004_221014	14 Oct 2022	ES2237106	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_SW004	0021_SW004_230421	21 Apr 2023	ES2313364	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_SW004	0021_SW004_240412	12 Apr 2024	ES2412012	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_SW004	0021_SW004_250402	02 Apr 2025	ES2510622	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_SW011	B_SW02	11 Apr 2017	ES1708884	0.0846	0.151	0.0028	0.279	0.265	-	0.236	-	0.0101	<0.0005	-	0.0038	-	0.0098
Mary Creek	Source	0021_SW011	0021_SW011_211020	20 Oct 2021	ES2138639	0.01	0.01	<0.01	0.02	0.02	-	0.02	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_SW011	0021_SW011_220407	07 Apr 2022	ES2212442	0.01	<0.01	<0.01	0.01	0.01	-	0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_SW011	0021_SW011_221012	12 Oct 2022	ES2237106	0.21	0.07	<0.01	0.30	0.30	-	0.28	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_SW011	0021_SW011_230420	20 Apr 2023	ES2313364	0.09	0.13	<0.01	0.22	0.22	-	0.22	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_SW011	0021_SW011_240410	10 Apr 2024	ES2412012	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_SW017	DC_SW02	13 Apr 2017	ES1709064	0.662	0.934	0.0213	1.82	1.72	-	1.60	-	0.0459	0.0018	-	0.0325	-	0.0663
Mary Creek	Source	0021_SW017	0021_QC206_220406	06 Apr 2022	293031	0.77	0.47	0.03	1.4	-	0.80	1.2	-	0.02	<0.02	-	0.02	-	0.03
Mary Creek	Source	0021_SW017	0021_SW017_220406	06 Apr 2022	ES2212442	0.65	0.42	0.02	1.23	1.21	-	1.07	-	0.02	<0.02	-	<0.02	-	0.02
Mary Creek	Source	0021_SW017	0021_SW017_221014	14 Oct 2022	ES2237106	5.18	1.31	0.08	7.03	6.91	-	6.49	-	0.04	<0.02	-	0.07	-	0.05
Mary Creek	Source	0021_SW017	0021_SW017_250526	26 May 2025	ES2516045	0.66	0.44	0.02	1.26	1.22	-	1.10	-	0.04	<0.02	-	<0.02	-	0.04
Mary Creek	Source	0021_SW017	0021_SW017_250704	04 Jul 2025	ES2520608	0.18	0.14	<0.01	0.34	0.34	-	0.32	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_SW017	0021_SW017_250805	05 Aug 2025	ES2524252	1.60	1.11	0.05	3.14	3.04	-	2.71	-	0.04	<0.02	-	0.04	-	0.06
Mary Creek	Source	0021_SW017	0021_SW017_250825	25 Aug 2025	ES2526742	0.40	0.25	0.01	0.72	0.72	-	0.65	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Mary Creek	Source	0021_SW017	0021_SW017_250912	12 Sep 2025	ES2528885	0.08	0.10	<0.01	0.18	0.18	-	0.18	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_SW110	0021_QC101_200804	04 Aug 2020	ES2027217	0.148	0.117	0.0040	0.311	0.299	-	0.265	-	0.0041	<0.0005	-	0.0049	-	0.0072
Mary Creek	Source	0021_SW110	0021_QC201_200804	04 Aug 2020	736971	0.12	0.004	0.003	0.165	0.149	0.123	0.124	0.127	0.005	<0.001	-	0.006	0.002	0.008
Mary Creek	Source	0021_SW110	0021_SW110_200804	04 Aug 2020	ES2027217	0.147	0.108	0.0037	0.302	0.289	-	0.255	-	0.0053	<0.0016 ^{#2}	-	0.0046	-	0.0091
Mary Creek	Source	0021_SW110	0021_QC109_200810	10 Aug 2020	ES2028286	1.37	0.546	0.0437	2.21	2.13	-	1.92	-	0.0272	0.0015	-	0.0366	-	0.0397
Mary Creek	Source	0021_SW110	0021_QC209_200810	10 Aug 2020	737847	1.0	0.66	0.026 ^{#1}	1.915	1.823	1.026	1.66	1.686	0.019	<0.001	-	0.053	0.008	0.030
Mary Creek	Source	0021_SW110	0021_SW110_200810	10 Aug 2020	ES2028286	1.25	0.530	0.0368	2.06	1.99	-	1.78	-	0.0275	<0.0005	-	0.0339	-	0.0381
Mary Creek	Source	0021_SW110	0021_SW110_211019	19 Oct 2021	ES2138639	0.16	0.05	<0.01	0.21	0.21	-	0.21	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_SW110	0021_QC100_211122	22 Nov 2021	ES2142514	0.77	0.31	0.02	1.21	1.19	-	1.08	-	0.02	<0.02	-	<0.02	-	0.02
Mary Creek	Source	0021_SW110	0021_SW110_211122	22 Nov 2021	ES2142514	0.55	0.29	0.01	0.97	0.95	-	0.84	-	0.03	<0.02	-	<0.02	-	0.02
Mary Creek	Source	0021_SW110	0021_SW110_220405	05 Apr 2022	ES2212442	0.32	0.15	<0.01	0.50	0.50	-	0.47	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_SW110	0021_SW110_221013	13 Oct 2022	ES2237106	0.96	0.20	0.01	1.20	1.20	-	1.16	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_SW110	0021_QC111_230420	20 Apr 2023	ES2313364	0.48	0.16	<0.01	0.67	0.67	-	0.64	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_SW110	0021_QC211_230420	20 Apr 2023	321517	0.39	0.18	0.01	0.64	-	0.40	0.57	-	<0.01	<0.02	-	0.02	-	0.01
Mary Creek	Source	0021_SW110	0021_SW110_230420	20 Apr 2023	ES2313364	0.32	0.12	<0.01	0.46	0.46	-	0.44	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_SW110	0021_SW110_231019	19 Oct 2023	ES2336399	3.00	1.07	0.08	4.78	4.60	-	4.07	-	0.06	<0.02	-	0.10	-	0.08



Appendix B
Table B5f
Historical Water Analytical Results - Mary Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids					
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	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)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecane sulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPPs)	Perfluoropentane sulfonic acid (PFPeS)
	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	0.0001	0.0005	0.0005	0.0003	0.0003	0.001	0.0003	0.001	0.0005	0.0005	0.01	0.0005	0.001	0.0005
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13		220											
PFAS NEMP 3.0 2025 Recreational water quality	2	2	10				2							

Catchment	SPR	Location	Field ID	Date	Lab Report No.														
Mary Creek	Source	0021_SW110	0021_QC110_240410	10 Apr 2024	ES2412012	0.72	0.46	0.02	1.37	1.33	-	1.18	-	0.03	<0.02	-	<0.02	-	0.04
Mary Creek	Source	0021_SW110	0021_QC210_240410	10 Apr 2024	348825	0.61	0.41	0.02	1.2	-	0.63	1.0	-	0.02	<0.02	-	<0.01	-	0.04
Mary Creek	Source	0021_SW110	0021_SW110_240410	10 Apr 2024	ES2412012	0.70	0.46	0.02	1.33	1.29	-	1.16	-	0.03	<0.02	-	<0.02	-	0.04
Mary Creek	Source	0021_SW110	0021_QC108_241024	24 Oct 2024	ES2435541	2.39	0.96	<0.01	3.80	3.65	-	3.35	-	0.05	<0.02	-	0.07	-	0.08
Mary Creek	Source	0021_SW110	0021_QC208_241024	24 Oct 2024	1156146	3.8	1.3	0.08	5.81	5.57	3.88	5.1	5.18	0.09	<0.01	<0.01	0.11	0.03	0.10
Mary Creek	Source	0021_SW110	0021_SW110_241024	24 Oct 2024	ES2435541	2.67	1.05	0.06	4.34	4.15	-	3.72	-	0.06	<0.02	-	0.07	-	0.10
Mary Creek	Source	0021_SW110	0021_SW110_250403	03 Apr 2025	ES2510623	0.31	0.29	0.01	0.70	0.68	-	0.60	-	<0.02	<0.02	-	<0.02	-	0.02
Mary Creek	Source	0021_SW127	0021_QC122_200820	20 Aug 2020	EW2003840	10.7	4.96	0.208	18.4	17.3	-	15.7	-	0.252	0.0603	-	0.417	-	0.617
Mary Creek	Source	0021_SW127	0021_SW127_200820	20 Aug 2020	EW2003840	7.08	4.74	0.173	13.9	13.1	-	11.8	-	0.207	0.0128	-	0.309	-	0.478
Mary Creek	Source	0021_SW127	0021_QC105_211020	20 Oct 2021	ES2138639	0.99	0.54	0.02	1.71	1.65	-	1.53	-	0.02	<0.02	-	0.02	-	0.04
Mary Creek	Source	0021_SW127	0021_SW127_211020	20 Oct 2021	ES2138639	0.81	0.46	0.02	1.39	1.36	-	1.27	-	<0.02	<0.02	-	<0.02	-	0.03
Mary Creek	Source	0021_SW127	0021_SW127_211122	22 Nov 2021	ES2142514	8.34	3.47	0.16	13.4	13.0	-	11.8	-	0.21	0.02	-	0.19	-	0.27
Mary Creek	Source	0021_SW127	0021_SW127_220407	07 Apr 2022	ES2212442	0.04	0.02	<0.01	0.06	0.06	-	0.06	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_SW127	0021_SW127_221012	12 Oct 2022	ES2237106	4.32	1.93	0.09	7.05	6.78	-	6.25	-	0.08	<0.02	-	0.11	-	0.16
Mary Creek	Source	0021_SW127	0021_QC261_230202	02 Feb 2023	961609	5.7 ^{#1}	4.3 ^{#1}	0.17 ^{#1}	11.95	11.35	5.87	10	10.17	0.26	0.01	0.02	0.16 ^{#1}	0.09	0.32 ^{#1}
Mary Creek	Source	0021_SW127	0021_SW127_230202	02 Feb 2023	ES2303445	4.49	4.80	0.16	11.1	10.6	-	9.29	-	0.23	<0.02	-	0.21	-	0.33
Mary Creek	Source	0021_SW127	0021_SW127_230309	09 Mar 2023	ES2308203	6.01	2.45	0.14	9.80	9.34	-	8.46	-	0.16	0.02	-	0.20	-	0.24
Mary Creek	Source	0021_SW127	0021_SW127_230420	20 Apr 2023	ES2313364	3.93	3.57	0.12	8.65	8.20	-	7.50	-	0.12	<0.02	-	0.13	-	0.32
Mary Creek	Source	0021_SW127	0021_QC100_230501	01 May 2023	ES2314437	0.12	0.06	<0.01	0.18	0.18	-	0.18	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_SW127	0021_QC200_230501	01 May 2023	987074	0.14 ^{#1}	0.07 ^{#1}	<0.01	0.21	0.21	0.14	0.21	0.21	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mary Creek	Source	0021_SW127	0021_SW127_230501	01 May 2023	ES2314437	0.11	0.06	<0.01	0.17	0.17	-	0.17	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_SW127	0021_SW127_230606	06 Jun 2023	ES2319084	2.26	1.53	0.08	4.50	4.27	-	3.79	-	0.09	<0.02	-	0.09	-	0.14
Mary Creek	Source	0021_SW127	0021_SW127_231018	18 Oct 2023	ES2336399	7.25	2.24	0.12	10.6	10.2	-	9.49	-	0.13	<0.02	-	0.18	-	0.21
Mary Creek	Source	0021_SW127	0021_SW127_240410	10 Apr 2024	ES2412012	3.26	2.64	0.09	6.85	6.52	-	5.90	-	0.13	<0.02	-	0.10	-	0.19
Mary Creek	Source	0021_SW127	0021_SW127_250401	01 Apr 2025	ES2510623	2.06	1.33	0.04	3.78	3.63	-	3.39	-	0.05	<0.02	-	0.06	-	0.09
Mary Creek	Source	0021_SW153	0021_SW153_210831	31 Aug 2021	ES2131665	4.64	4.27	0.19	10.8	10.2	-	8.91	-	0.25	<0.02	-	0.20	-	0.38
Mary Creek	Source	0021_SW153	0021_QC121_211111	11 Nov 2021	EW2104861	14.6	6.67	0.26	24.0	23.2	-	21.3	-	0.32	0.03	-	0.38	-	0.34
Mary Creek	Source	0021_SW153	0021_SW153_2111112211	11 Nov 2021	EW2104861	14.7	6.30	0.27	23.9	23.0	-	21.0	-	0.39	<0.02	-	0.39	-	0.50
Mary Creek	Source	0021_SW153	0021_SW153_2111112313	11 Nov 2021	EW2104861	7.02	2.33	0.11	10.5	10.2	-	9.35	-	0.16	<0.02	-	0.14	-	0.20
Mary Creek	Source	0021_SW153	0021_QC122_211112	12 Nov 2021	EW2104861	3.73	1.75	0.07	6.25	6.05	-	5.48	-	0.09	<0.02	-	0.09	-	0.11
Mary Creek	Source	0021_SW153	0021_QC221_211112	12 Nov 2021	844059	3.1 ^{#1}	1.1 ^{#1}	0.05	4.72	4.55	3.15	4.2	4.25	0.05	<0.01	-	0.07 ^{#1}	0.01	0.08 ^{#1}
Mary Creek	Source	0021_SW153	0021_QC222_211112	12 Nov 2021	844059	3.8 ^{#1}	1.8 ^{#1}	0.08	6.36	6.1	3.88	5.6	5.68	0.06	<0.01	-	0.11 ^{#1}	0.02	0.11 ^{#1}
Mary Creek	Source	0021_SW153	0021_SW153_2111120014	12 Nov 2021	EW2104861	7.17	2.76	0.12	11.2	10.9	-	9.93	-	0.17	<0.02	-	0.13	-	0.23
Mary Creek	Source	0021_SW153	0021_SW153_2111120115	12 Nov 2021	EW2104861	6.12	2.47	0.12	9.84	9.48	-	8.59	-	0.16	<0.02	-	0.14	-	0.22
Mary Creek	Source	0021_SW153	0021_SW153_2111120216	12 Nov 2021	EW2104861	5.20	2.52	0.11	8.97	8.62	-	7.72	-	0.17	<0.02	-	0.13	-	0.22
Mary Creek	Source	0021_SW153	0021_SW153_2111120317	12 Nov 2021	EW2104861	3.80	2.17	0.10	7.10	6.78	-	5.97	-	0.16	<0.02	-	0.13	-	0.19
Mary Creek	Source	0021_SW153	0021_SW153_2111120418	12 Nov 2021	EW2104861	3.43	2.08	0.09	6.49	6.21	-	5.51	-	0.13	<0.02	-	0.10	-	0.18
Mary Creek	Source	0021_SW153	0021_SW153_2111120520	12 Nov 2021	EW2104861	3.45	2.09	0.09	6.57	6.28	-	5.54	-	0.13	<0.02	-	0.11	-	0.18
Mary Creek	Source	0021_SW153	0021_SW153_2111120621	12 Nov 2021	EW2104861	3.62	2.09	0.09	6.73	6.44	-	5.71	-	0.13	<0.02	-	0.11	-	0.18
Mary Creek	Source	0021_SW153	0021_SW153_2111120722	12 Nov 2021	EW2104861	3.40	1.94	0.08	6.24	5.99	-	5.34	-	0.13	<0.02	-	0.09	-	0.16
Mary Creek	Source	0021_SW153	0021_SW153_2111120823	12 Nov 2021	EW2104861	2.81	1.51	0.07	5.06	4.85	-	4.32	-	0.10	<0.02	-	0.08	-	0.13
Mary Creek	Source	0021_SW153	0021_SW153_2111120924	12 Nov 2021	EW2104861	3.46	1.80	0.08	6.12	5.87	-	5.26	-	0.11	<0.02	-	0.10	-	0.15
Mary Creek	Source	0021_SW153	0021_SW153_2111121025	12 Nov 2021	EW2104861	2.98	1.62	0.07	5.39	5.17	-	4.60	-	0.11	<0.02	-	0.08	-	0.14
Mary Creek	Source	0021_SW153	0021_SW153_2111121127	12 Nov 2021	EW2104861	3.72	1.75	0.07	6.22	6.04	-	5.47	-	0.09	<0.02	-	0.09	-	0.09
Mary Creek	Source	0021_SW153	0021_SW153_2111121228	12 Nov 2021	EW2104861	4.18	1.74	0.07	6.69	6.50	-	5.92	-	0.09	<0.02	-	0.09	-	0.10
Mary Creek	Source	0021_SW153	0021_SW153_2111121329	12 Nov 2021	EW2104861	4.77	2.05	0.08	7.73	7.50	-	6.82	-	0.10	<0.02	-	0.11	-	0.12
Mary Creek	Source	0021_SW153	0021_SW153_2111121430	12 Nov 2021	EW2104861	4.90	2.14	0.09	7.97	7.72	-	7.04	-	0.10	<0.02	-	0.12	-	0.13
Mary Creek	Source	0021_SW153	0021_SW153_2111121531	12 Nov 2021	EW2104861	4.94	2.08	0.09	7.96	7.72	-	7.02	-	0.11	<0.02	-	0.11	-	0.13
Mary Creek	Source	0021_SW153	0021_SW153_2111121632	12 Nov 2021	EW2104861	5.47	2.34	0.10	8.83	8.58	-	7.81	-	0.12	<0.02	-	0.13	-	0.12
Mary Creek	Source	0021_SW153	0021_SW153_2111121734	12 Nov 2021	EW2104861	3.58	1.57	0.06	5.83	5.66	-	5.15	-	0.08	<0.02	-	0.08	-	0.09
Mary Creek	Source	0021_SW153	0021_SW153_2111121835	12 Nov 2021	EW2104861	4.49	2.20	0.09	7.64	7.42	-	6.69	-	0.11	<0.02	-	0.11	-	0.11



Appendix B
Table B5f
Historical Water Analytical Results - Mary Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids					
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	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)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPPs)	Perfluoropentane sulfonic acid (PFPeS)
	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	0.0001	0.0005	0.0005	0.0003	0.0003	0.001	0.0003	0.001	0.0005	0.0005	0.01	0.0005	0.001	0.0005
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13		220											
PFAS NEMP 3.0 2025 Recreational water quality	2	2	10				2							

Catchment	SPR	Location	Field ID	Date	Lab Report No.													
Mary Creek	Source	0021_SW153	0021_SW153_2111121936	12 Nov 2021	EW2104861		5.34	2.42	0.10	8.80	8.56	-	7.76	-	0.12	<0.02	-	0.12
Mary Creek	Source	0021_SW153	0021_SW153_2111122037	12 Nov 2021	EW2104861		4.87	2.26	0.09	8.13	7.89	-	7.13	-	0.11	<0.02	-	0.12
Mary Creek	Source	0021_SW153	0021_QC123_211210	10 Dec 2021	ES2146373		8.35	4.00	0.20	14.5	13.9	-	12.4	-	0.28	<0.02	-	0.30
Mary Creek	Source	0021_SW153	0021_QC223_211210	10 Dec 2021	852877		5.8 ^{#1}	1.9 ^{#1}	0.08 ^{#1}	8.45	8.24	5.88	7.7	7.78	0.09 ^{#1}	<0.01	-	0.08 ^{#1}
Mary Creek	Source	0021_SW153	0021_SW153_2112100431	10 Dec 2021	ES2146373		9.15	4.76	0.23	16.2	15.6	-	13.9	-	0.25	0.03	-	0.26
Mary Creek	Source	0021_SW153	0021_SW153_2112100833	10 Dec 2021	ES2146373		5.25	2.51	0.12	8.94	8.64	-	7.76	-	0.12	0.02	-	0.13
Mary Creek	Source	0021_SW153	0021_SW153_2112101234	10 Dec 2021	ES2146373		4.07	2.15	0.10	7.24	6.99	-	6.22	-	0.11	<0.02	-	0.12
Mary Creek	Source	0021_SW153	0021_SW153_2112101635	10 Dec 2021	ES2146373		1.82	0.90	0.04	3.12	3.01	-	2.72	-	0.05	<0.02	-	0.05
Mary Creek	Source	0021_SW153	0021_SW153_2112102036	10 Dec 2021	ES2146373		1.72	0.81	0.03	2.88	2.79	-	2.53	-	0.04	<0.02	-	0.04
Mary Creek	Source	0021_SW153	0021_QC124_211211	11 Dec 2021	ES2146373		4.47	1.86	0.09	7.25	7.00	-	6.33	-	0.12	<0.02	-	0.12
Mary Creek	Source	0021_SW153	0021_QC224_211211	11 Dec 2021	852877		6.3 ^{#1}	2.0 ^{#1}	0.08 ^{#1}	9.05	8.8	6.38	8.3	8.38	0.10 ^{#1}	<0.01	-	0.11 ^{#1}
Mary Creek	Source	0021_SW153	0021_SW153_2112110037	11 Dec 2021	ES2146373		2.27	1.14	0.05	3.92	3.79	-	3.41	-	0.06	<0.02	-	0.06
Mary Creek	Source	0021_SW153	0021_SW153_2112110438	11 Dec 2021	ES2146373		3.06	1.47	0.07	5.19	5.02	-	4.53	-	0.08	<0.02	-	0.08
Mary Creek	Source	0021_SW153	0021_SW153_2112110840	11 Dec 2021	ES2146373		3.70	1.64	0.07	6.08	5.89	-	5.34	-	0.09	<0.02	-	0.09
Mary Creek	Source	0021_SW153	0021_SW153_2112111642	11 Dec 2021	ES2146373		4.70	2.16	0.10	7.84	7.59	-	6.86	-	0.12	<0.02	-	0.12
Mary Creek	Source	0021_SW153	0021_SW153_2112112043	11 Dec 2021	ES2146373		5.51	2.45	0.10	9.06	8.76	-	7.96	-	0.13	<0.02	-	0.14
Mary Creek	Source	0021_SW153	0021_SW153_2112120445	12 Dec 2021	ES2146373		6.06	2.95	0.11	10.3	9.93	-	9.01	-	0.15	<0.02	-	0.16
Mary Creek	Source	0021_SW153	0021_SW153_2112120847	12 Dec 2021	ES2146373		6.23	3.16	0.12	10.8	10.4	-	9.39	-	0.17	<0.02	-	0.18
Mary Creek	Source	0021_SW153	0021_SW153_2112130051	13 Dec 2021	ES2146373		6.30	3.20	0.13	10.9	10.5	-	9.50	-	0.17	<0.02	-	0.19
Mary Creek	Source	0021_SW153	0021_SW153_2112131255	13 Dec 2021	ES2146373		7.84	4.28	0.17	14.1	13.6	-	12.1	-	0.24	0.02	-	0.25
Mary Creek	Source	0021_SW153	0021_QC102_202022	22 Feb 2022	ES2206899		1.44	1.07	0.04	2.93	2.78	-	2.51	-	0.08	<0.02	-	0.04
Mary Creek	Source	0021_SW153	0021_QC103_202022	22 Feb 2022	ES2206899		1.10	0.76	0.03	2.17	2.06	-	1.86	-	0.06	<0.02	-	0.04
Mary Creek	Source	0021_SW153	0021_QC202_220222	22 Feb 2022	868765		1.3 ^{#1}	1.2 ^{#1}	0.03 ^{#1}	2.97	2.84	1.33	2.5	2.53	0.09	<0.01	-	0.04 ^{#1}
Mary Creek	Source	0021_SW153	0021_QC203_220222	22 Feb 2022	868765		1.0 ^{#1}	0.91 ^{#1}	0.02 ^{#1}	2.27	2.16	1.02	1.91	1.93	0.06	<0.01	-	0.03 ^{#1}
Mary Creek	Source	0021_SW153	0021_SW153_2202220055	22 Feb 2022	ES2206899		6.03	2.72	0.17	10.7	9.92	-	8.75	-	0.29	0.02	-	0.32
Mary Creek	Source	0021_SW153	0021_SW153_2202220156	22 Feb 2022	ES2206899		3.71	2.33	0.09	7.02	6.68	-	6.04	-	0.16	<0.02	-	0.13
Mary Creek	Source	0021_SW153	0021_SW153_2202220257	22 Feb 2022	ES2206899		3.81	1.87	0.09	6.56	6.26	-	5.68	-	0.15	<0.02	-	0.13
Mary Creek	Source	0021_SW153	0021_SW153_2202220358	22 Feb 2022	ES2206899		2.40	1.18	0.05	4.12	3.95	-	3.58	-	0.08	<0.02	-	0.07
Mary Creek	Source	0021_SW153	0021_SW153_2202220459	22 Feb 2022	ES2206899		2.10	1.07	0.05	3.66	3.51	-	3.17	-	0.10	<0.02	-	0.06
Mary Creek	Source	0021_SW153	0021_SW153_2202220803	22 Feb 2022	ES2206899		1.50	0.91	0.04	2.78	2.66	-	2.41	-	0.07	<0.02	-	0.04
Mary Creek	Source	0021_SW153	0021_SW153_2202221005	22 Feb 2022	ES2206899		1.54	0.98	0.04	2.93	2.80	-	2.52	-	0.09	<0.02	-	0.04
Mary Creek	Source	0021_SW153	0021_SW153_2202221106	22 Feb 2022	ES2206899		1.86	1.69	0.06	4.25	4.02	-	3.55	-	0.14	<0.02	-	0.07
Mary Creek	Source	0021_SW153	0021_SW153_2202221410	22 Feb 2022	ES2206899		1.99	1.59	0.06	4.26	4.03	-	3.58	-	0.12	<0.02	-	0.08
Mary Creek	Source	0021_SW153	0021_SW153_2202221713	22 Feb 2022	ES2206899		1.55	1.36	0.05	3.43	3.25	-	2.91	-	0.10	<0.02	-	0.06
Mary Creek	Source	0021_SW153	0021_SW153_2202222017	22 Feb 2022	ES2206899		1.07	0.77	0.03	2.15	2.05	-	1.84	-	0.06	<0.02	-	0.04
Mary Creek	Source	0021_SW153	0021_SW153_2202230022	23 Feb 2022	ES2206899		1.37	0.72	0.03	2.34	2.26	-	2.09	-	0.05	<0.02	-	0.03
Mary Creek	Source	0021_SW153	0021_SW153_220408	08 Apr 2022	ES2212827		1.15	0.53	0.02	1.86	1.81	-	1.68	-	0.02	<0.02	-	0.02
Mary Creek	Source	0021_SW153	0021_SW153_2205120953	12 May 2022	ES2216861		1.63	0.80	0.04	2.74	2.64	-	2.43	-	0.03	<0.02	-	0.04
Mary Creek	Source	0021_SW153	0021_SW153_2205121054	12 May 2022	ES2216861		1.74	0.88	0.04	2.98	2.87	-	2.62	-	0.04	<0.02	-	0.05
Mary Creek	Source	0021_SW153	0021_SW153_2205121155	12 May 2022	ES2216861		2.07	0.97	0.05	3.45	3.33	-	3.04	-	0.05	<0.02	-	0.06
Mary Creek	Source	0021_SW153	0021_SW153_2205121257	12 May 2022	ES2216861		1.90	0.91	0.05	3.21	3.09	-	2.81	-	0.05	<0.02	-	0.05
Mary Creek	Source	0021_SW153	0021_SW153_2205121358	12 May 2022	ES2216861		2.14	0.91	0.05	3.45	3.32	-	3.05	-	0.04	<0.02	-	0.06
Mary Creek	Source	0021_SW153	0021_SW153_2205121459	12 May 2022	ES2216861		2.03	0.89	0.05	3.30	3.19	-	2.92	-	0.04	<0.02	-	0.05
Mary Creek	Source	0021_SW153	0021_SW153_221012	12 Oct 2022	ES2237106		3.71	2.19	0.12	6.93	6.61	-	5.90	-	0.11	<0.02	-	0.13
Mary Creek	Source	0021_SW153	0021_QC112_230420	20 Apr 2023	ES2313364		4.54	2.96	0.14	8.92	8.50	-	7.50	-	0.20	<0.02	-	0.15
Mary Creek	Source	0021_SW153	0021_QC212_230420	20 Apr 2023	321517		4.7	3.5	0.15	9.7	-	4.8	8.2	-	0.18	<0.02	-	0.18
Mary Creek	Source	0021_SW153	0021_SW153_230420	20 Apr 2023	ES2313364		4.01	3.34	0.12	8.47	8.02	-	7.35	-	0.11	<0.02	-	0.14
Mary Creek	Source	0021_SW153	0021_QC107_231018	18 Oct 2023	ES2336399		1.28	1.44	0.06	3.44	3.23	-	2.72	-	0.10	<0.02	-	0.05
Mary Creek	Source	0021_SW153	0021_QC207_231018	18 Oct 2023	335876		1.4	1.7	0.09	4.2	-	1.5	3.1	-	0.14	<0.02	-	0.08
Mary Creek	Source	0021_SW153	0021_SW153_231018	18 Oct 2023	ES2336399		1.47	1.29	0.06	3.46	3.25	-	2.76	-	0.09	<0.02	-	0.06
Mary Creek	Source	0021_SW153	0021_SW153_240410	10 Apr 2024	ES2412012		3.62	2.62	0.08	7.15	6.82	-	6.24	-	0.12	<0.02	-	0.10



Appendix B
Table B5f
Historical Water Analytical Results - Mary Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids					
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	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)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)
	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	0.0001	0.0005	0.0005	0.0003	0.0003	0.001	0.0003	0.001	0.0005	0.0005	0.01	0.0005	0.001	0.0005
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13		220											
PFAS NEMP 3.0 2025 Recreational water quality	2	2	10				2							

Catchment	SPR	Location	Field ID	Date	Lab Report No.														
Mary Creek	Source	0021_SW153	0021_QC102_250331	31 Mar 2025	ES2510113	1.36	0.68	0.02	2.24	2.17	-	2.04	-	0.03	<0.02	-	0.03	-	0.04
Mary Creek	Source	0021_SW153	0021_QC202_250331	31 Mar 2025	1210052	1.7	0.74	0.03	2.72	2.63	1.73	2.44	2.47	0.04	<0.01	<0.01	0.04	<0.01	0.05
Mary Creek	Source	0021_SW153	0021_SW153_250331	31 Mar 2025	ES2510623	1.16	0.69	0.02	2.07	2.00	-	1.85	-	0.03	<0.02	-	0.03	-	0.04
Mary Creek	Source	0021_SW153	0021_QC100_250526	26 May 2025	ES2516045	2.00	1.06	0.05	3.58	3.39	-	3.06	-	0.06	<0.02	-	0.07	-	0.10
Mary Creek	Source	0021_SW153	0021_QC200_250526	26 May 2025	1227520	2.4 ^{#1}	1.1 ^{#1}	0.06 ^{#1}	4.02	3.84	2.46	3.5	3.56	0.07	<0.01	0.01	0.07 ^{#1}	0.02	0.08 ^{#1}
Mary Creek	Source	0021_SW153	0021_SW153_250526	26 May 2025	ES2516045	1.94	1.03	0.05	3.49	3.30	-	2.97	-	0.06	<0.02	-	0.07	-	0.10
Mary Creek	Source	0021_SW153	0021_SW153_250702	02 Jul 2025	ES2520608	0.88	0.22	0.02	1.15	1.15	-	1.10	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Source	0021_SW153	0021_SW153_250805	05 Aug 2025	ES2524252	2.46	1.19	0.06	4.14	3.98	-	3.65	-	0.05	<0.02	-	0.07	-	0.07
Mary Creek	Source	0021_SW153	0021_SW153_250825	25 Aug 2025	ES2526742	3.14	1.39	0.08	5.19	4.95	-	4.53	-	0.07	<0.02	<0.02	0.10	0.03	0.11
Mary Creek	Source	0021_SW153	0021_QC100_250912	12 Sep 2025	ES2528885	2.07	0.92	0.07	3.47	3.32	-	2.99	-	0.05	<0.02	-	0.07	-	0.08
Mary Creek	Source	0021_SW153	021_QC200_250912	12 Sep 2025	1269913	3.1 ^{#1}	1.2 ^{#1}	0.06 ^{#1}	4.8	4.58	-	4.3	-	0.05 ^{#1}	<0.01	0.01 ^{#1}	0.08 ^{#1}	0.02	0.06 ^{#1}
Mary Creek	Source	0021_SW153	0021_SW153_250912	12 Sep 2025	ES2528885	1.94	0.98	0.06	3.38	3.24	-	2.92	-	0.06	<0.02	-	0.06	-	0.08
Mary Creek	Source	0021_SW153	0021_SW153_251023	23 Oct 2025	ES2533538	5.08	2.88	0.14	9.31	8.87	-	7.96	-	0.23	<0.02	-	0.16	-	0.21
Mary Creek	Pathway	0021_MW021	MW021	01 May 2017	ES1710866	<0.0003	0.0016	<0.0005	0.0021	0.0016	-	0.0016	-	<0.0005	<0.0005	-	<0.0005	-	0.0005
Mary Creek	Pathway	0021_MW021	0021_MW021_241025	25 Oct 2024	ES2435541	0.05	0.02	<0.01	0.07	0.07	-	0.07	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW021	0021_QC161_241025	25 Oct 2024	ES2435541	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW021	0021_QC261_241025	25 Oct 2024	1156146	<0.01	<0.01	<0.01	<0.1	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mary Creek	Pathway	0021_MW021	0021_MW021_250401	01 Apr 2025	ES2510113	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW021	0021_MW021_251021	21 Oct 2025	ES2533521	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW021	0021_QC124_251021	21 Oct 2025	ES2533538	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW021	0021_QC224_251021	21 Oct 2025	1285374	<0.01	<0.01	<0.01	<0.1	<0.05	-	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mary Creek	Pathway	0021_MW060	0021_MW060_210623	23 Jun 2021	ES2123994	0.03	0.08	<0.01	0.11	0.11	-	0.11	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW060	0021_MW060_211122	22 Nov 2021	ES2142514	0.02	0.01	<0.01	0.03	0.03	-	0.03	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW060	0021_MW060_241025	25 Oct 2024	ES2435541	0.06	0.03	<0.01	0.09	0.09	-	0.09	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW060	0021_MW060_250130	30 Jan 2025	ES2503552	0.26	0.03	<0.01	0.29	0.29	-	0.29	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Mary Creek	Pathway	0021_MW060	0021_MW060_250401	01 Apr 2025	ES2510113	0.03	<0.01	<0.01	0.03	0.03	-	0.03	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW060	0021_MW060_251023	23 Oct 2025	ES2533521	0.06	0.02	<0.01	0.08	0.08	-	0.08	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW070	0021_MW070_210623	23 Jun 2021	ES2123994	66.5	5.90	0.41	75.0	73.7	-	72.4	-	0.22	<0.02	-	0.87	-	0.38
Mary Creek	Pathway	0021_MW070	0021_QC202_211122	22 Nov 2021	845848	51 ^{#1}	3.8 ^{#1}	0.22 ^{#1}	56.54	55.79	51.22	54.8	55.02	0.20	<0.01	-	0.47 ^{#1}	0.07	0.21 ^{#1}
Mary Creek	Pathway	0021_MW070	0021_MW070_211123	23 Nov 2021	ES2142514	69.5	5.30	0.31	77.4	76.3	-	74.8	-	0.28	<0.02	-	0.70	-	0.42
Mary Creek	Pathway	0021_MW070	0021_MW070_241025	25 Oct 2024	ES2435541	36.2	3.51	0.29	41.3	40.5	-	39.7	-	0.10	<0.02	-	0.48	-	0.14
Mary Creek	Pathway	0021_MW070	0021_MW070_250130	30 Jan 2025	ES2503552	28.4	3.96	0.25	34.0	33.2	-	32.4	-	0.10	<0.02	0.09	0.48	0.04	0.21
Mary Creek	Pathway	0021_MW070	0021_MW070_250407	07 Apr 2025	ES2510113	40.4	5.92	0.30	48.4	47.3	-	46.3	-	0.11	<0.02	-	0.71	-	0.27
Mary Creek	Pathway	0021_MW070	0021_MW070_251023	23 Oct 2025	ES2533521	26.2	2.91	0.20	30.6	29.8	-	29.1	-	0.11	<0.02	-	0.45	-	0.20
Mary Creek	Pathway	0021_MW071	0021_MW071_210623	23 Jun 2021	ES2123994	0.41	2.11	0.08	3.71	3.36	-	2.52	-	0.24	<0.02	-	0.07	-	0.28
Mary Creek	Pathway	0021_MW071	0021_MW071_211123	23 Nov 2021	ES2142514	0.37	2.58	0.09	4.63	4.15	-	2.95	-	0.36	<0.02	-	0.07	-	0.41
Mary Creek	Pathway	0021_MW071	0021_QC102_211123	23 Nov 2021	ES2142514	0.47	2.84	0.10	5.16	4.64	-	3.31	-	0.39	<0.02	-	0.08	-	0.44
Mary Creek	Pathway	0021_MW071	0021_MW071_241025	25 Oct 2024	ES2435541	0.12	0.47	0.02	0.93	0.84	-	0.59	-	0.08	<0.02	-	<0.02	-	0.05
Mary Creek	Pathway	0021_MW071	0021_MW071_250130	30 Jan 2025	ES2503552	0.83	2.84	0.11	5.31	4.71	-	3.67	-	0.27	<0.02	<0.02	0.09	0.13	0.38
Mary Creek	Pathway	0021_MW071	0021_MW071_250407	07 Apr 2025	ES2510113	0.50	2.12	0.09	3.93	3.45	-	2.62	-	0.23	<0.02	-	0.07	-	0.31
Mary Creek	Pathway	0021_MW071	0021_MW071_251023	23 Oct 2025	ES2533521	1.76	1.41	0.06	3.92	3.63	-	3.17	-	0.11	<0.02	-	0.06	-	0.18
Mary Creek	Pathway	0021_MW072	0021_MW072_210623	23 Jun 2021	ES2123994	18.7	6.63	0.59	28.5	27.3	-	25.3	-	0.33	<0.02	-	0.58	-	0.57
Mary Creek	Pathway	0021_MW072	0021_MW072_211123	23 Nov 2021	ES2142514	24.2	8.73	0.64	37.0	35.4	-	32.9	-	0.43	<0.02	-	0.83	-	0.78
Mary Creek	Pathway	0021_MW072	0021_MW072_241025	25 Oct 2024	ES2435541	19.2	7.89	0.59	30.1	28.8	-	27.1	-	0.26	<0.02	-	0.74	-	0.45
Mary Creek	Pathway	0021_MW072	0021_MW072_250130	30 Jan 2025	ES2503552	20.7	9.43	0.58	33.6	32.0	-	30.1	-	0.25	<0.02	0.02	0.83	0.11	0.58
Mary Creek	Pathway	0021_MW072	0021_MW072_250407	07 Apr 2025	ES2510113	18.1	7.35	0.52	28.3	27.0	-	25.4	-	0.23	<0.02	-	0.80	-	0.43
Mary Creek	Pathway	0021_MW072	0021_MW072_251023	23 Oct 2025	ES2533521	18.4	6.69	0.54	28.0	26.7	-	25.1	-	0.22	<0.02	-	0.72	-	0.52
Mary Creek	Pathway	0021_MW112	B_MW03	28 Apr 2017	ES1710200	0.0053	0.0195	<0.0005	0.0328	0.0313	-	0.0248	-	0.0025	<0.0005	-	<0.0005	-	0.0015
Mary Creek	Pathway	0021_MW112	0021_MW112_210624	24 Jun 2021	ES2123994	0.01	<0.02	<0.01	0.01	0.01	-	0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW112	0021_MW112_211020	20 Oct 2021	ES2138639	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW112	0021_MW112_211123	23 Nov 2021	ES2142514	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02



Appendix B
Table B5f
Historical Water Analytical Results - Mary Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids					
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	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)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)
	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	0.0001	0.0005	0.0005	0.0003	0.0003	0.001	0.0003	0.001	0.0005	0.0005	0.01	0.0005	0.001	0.0005
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13		220											
PFAS NEMP 3.0 2025 Recreational water quality	2	2	10				2							

Catchment	SPR	Location	Field ID	Date	Lab Report No.														
Mary Creek	Pathway	0021_MW112	0021_MW112_220407	07 Apr 2022	ES2212442	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW112	0021_QC210_220407	07 Apr 2022	293031	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	-	<0.01	<0.02	-	<0.01	-	<0.01
Mary Creek	Pathway	0021_MW112	0021_MW112_221012	12 Oct 2022	ES2237106	0.01	<0.01	<0.01	0.01	0.01	-	0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW112	0021_MW112_230418	18 Apr 2023	ES2313364	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW112	0021_MW112_231016	16 Oct 2023	ES2336398	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW112	0021_MW112_240408	08 Apr 2024	ES2411994	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW112	0021_MW112_241024	24 Oct 2024	ES2435541	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW112	0021_MW112_250130	30 Jan 2025	ES2503552	0.17	0.01	<0.01	0.62	0.62	-	0.18	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Mary Creek	Pathway	0021_MW112	0021_MW112_250401	01 Apr 2025	ES2510113	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW112	0021_QC154_250401	01 Apr 2025	ES2510113	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW112	0021_MW112_251023	23 Oct 2025	ES2533521	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW113	B_MW04	28 Apr 2017	ES1710200	0.0189	0.0477	0.0005	0.0856	0.0805	-	0.0666	-	0.0046	<0.0005	-	0.0010	-	0.0041
Mary Creek	Pathway	0021_MW113	B_MW04_180502	02 May 2018	ES1812871	<0.01	<0.02	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW113	0021_MW113_210623	23 Jun 2021	ES2123994	0.02	<0.02	<0.01	0.02	0.02	-	0.02	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW113	0021_MW113_211020	20 Oct 2021	ES2138639	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW113	0021_MW113_211123	23 Nov 2021	ES2142514	0.03	0.05	<0.01	0.08	0.08	-	0.08	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW113	0021_MW113_220407	07 Apr 2022	ES2212442	0.02	0.03	<0.01	0.05	0.05	-	0.05	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW113	0021_MW113_221013	13 Oct 2022	ES2237106	0.06	0.05	<0.01	0.11	0.11	-	0.11	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW113	0021_MW113_230419	19 Apr 2023	ES2313364	0.05	0.06	<0.01	0.11	0.11	-	0.11	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW113	0021_MW113_231018	18 Oct 2023	ES2336398	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW113	0021_MW113_240410	10 Apr 2024	ES2411994	0.01	<0.01	<0.01	0.01	0.01	-	0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW113	0021_MW113_241024	24 Oct 2024	ES2435541	0.02	0.01	<0.01	0.03	0.03	-	0.03	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW113	0021_QC109_241024	24 Oct 2024	ES2435541	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW113	0021_QC209_241024	24 Oct 2024	1156160	<0.01	<0.01	<0.01	<0.1	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mary Creek	Pathway	0021_MW113	0021_MW113_250130	30 Jan 2025	ES2503552	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Mary Creek	Pathway	0021_MW113	0021_MW113_250130	30 Jan 2025	ES2503552	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Mary Creek	Pathway	0021_MW113	0021_MW113_250407	07 Apr 2025	ES2510113	0.04	<0.01	<0.01	0.04	0.04	-	0.04	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW133	MC_MW04_180411	11 Apr 2018	ES1810721	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	-	<0.0003	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005
Mary Creek	Pathway	0021_MW133	MC_MW04_180502	02 May 2018	ES1812871	<0.01	<0.02	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW133	0021_MW133_221012	11 Oct 2022	ES2237106	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW133	0021_MW133_230418	18 Apr 2023	ES2313364	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW133	0021_MW133_231017	17 Oct 2023	ES2336398	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW133	0021_MW133_240409	09 Apr 2024	ES2411994	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW133	0021_MW133_241023	23 Oct 2024	ES2435078	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW133	0021_MW133_250402	02 Apr 2025	ES2510113	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW133	0021_MW133_251021	21 Oct 2025	ES2533521	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW133	0021_QC103_251021	21 Oct 2025	ES2533538	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_MW133	0021_QC203_251021	21 Oct 2025	1285374	<0.01	<0.01	<0.01	<0.1	<0.05	-	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mary Creek	Pathway	0021_SW010	B_SW01	12 Apr 2017	ES1709064	3.07	1.87	0.0824	5.62	5.27	-	4.94	-	0.108	0.0088	-	0.135	-	0.193
Mary Creek	Pathway	0021_SW010	B_SW01_180501	01 May 2018	ES1812871	4.15	4.03	0.152	9.57	8.99	-	8.18	-	0.239	0.0033	-	0.188	-	0.394
Mary Creek	Pathway	0021_SW010	0021_SW010_211020	20 Oct 2021	ES2138639	3.30	2.57	0.09	6.92	6.51	-	5.87	-	0.18	<0.02	-	0.11	-	0.30
Mary Creek	Pathway	0021_SW010	0021_SW010_211122	22 Nov 2021	ES2142514	0.60	0.74	0.02	1.55	1.49	-	1.34	-	0.05	<0.02	-	<0.02	-	0.06
Mary Creek	Pathway	0021_SW010	0021_SW010_220407	07 Apr 2022	ES2212442	0.01	<0.01	<0.01	0.01	0.01	-	0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_SW010	0021_SW010_220512	12 May 2022	ES2216861	0.13	0.05	<0.01	0.18	0.18	-	0.18	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_SW010	0021_SW010_221012	12 Oct 2022	ES2237106	4.79	1.70	0.09	7.23	7.01	-	6.49	-	0.08	<0.02	-	0.11	-	0.11
Mary Creek	Pathway	0021_SW010	0021_SW010_230202	02 Feb 2023	ES2303445	0.12	0.10	<0.01	0.22	0.22	-	0.22	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_SW010	0021_SW010_230309	09 Mar 2023	ES2308203	0.19	0.07	<0.01	0.26	0.26	-	0.26	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_SW010	0021_SW010_230419	19 Apr 2023	ES2313364	0.19	0.10	<0.01	0.29	0.29	-	0.29	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_SW010	0021_SW010_230501	01 May 2023	ES2314437	0.19	0.11	<0.01	0.30	0.30	-	0.30	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_SW010	0021_QC100_230606	06 Jun 2023	ES2319084	1.23	1.09	0.03	2.61	2.47	-	2.32	-	0.06	<0.02	-	0.04	-	0.10
Mary Creek	Pathway	0021_SW010	0021_SW010_230606	06 Jun 2023	ES2319084	0.74	0.81	0.02	1.73	1.64	-	1.55	-	0.04	<0.02	-	0.02	-	0.07



Appendix B
Table B5f
Historical Water Analytical Results - Mary Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids					
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	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)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecane sulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)
	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	0.0001	0.0005	0.0005	0.0003	0.0003	0.001	0.0003	0.001	0.0005	0.0005	0.01	0.0005	0.001	0.0005
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13		220											
PFAS NEMP 3.0 2025 Recreational water quality	2	2	10				2							

Catchment	SPR	Location	Field ID	Date	Lab Report No.															
Mary Creek	Pathway	0021_SW010	0021_SW010_230808	08 Aug 2023	ES2326813		2.64	1.71	0.05	4.90	4.62	-	4.35	-	0.15	<0.02	-	0.08	-	0.20
Mary Creek	Pathway	0021_SW010	0021_SW010_231212	12 Dec 2023	ES2343587		10.2	3.52	0.20	15.0	14.5	-	13.7	-	0.10	<0.02	-	0.30	-	0.22
Mary Creek	Pathway	0021_SW010	0021_SW010_240410	10 Apr 2024	ES2412012		0.21	0.20	<0.01	0.41	0.41	-	0.41	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_SW010	0021_SW010_250130	30 Jan 2025	ES2503552		1.23	2.17	0.04	4.05	3.68	-	3.40	-	0.17	<0.02	<0.02	0.05	0.06	0.26
Mary Creek	Pathway	0021_SW010	0021_SW010_250404	04 Apr 2025	ES2510622		4.77	2.17	0.10	7.62	7.36	-	6.94	-	0.07	<0.02	-	0.12	-	0.12
Mary Creek	Pathway	0021_SW010	0021_QC102_250805	05 Aug 2025	ES2524252		0.27	0.10	<0.01	0.37	0.37	-	0.37	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_SW010	0021_QC202_250825	05 Aug 2025	1254110		0.26 ^{#1}	0.11 ^{#1}	<0.01	0.4	0.38	-	0.37	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mary Creek	Pathway	0021_SW010	0021_SW010_250805	05 Aug 2025	ES2524252		0.24	0.11	<0.01	0.37	0.37	-	0.35	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_SW010	0021_SW010_250825	25 Aug 2025	ES2526742		12.8	1.71	0.08	15.2	14.9	-	14.5	-	0.05	<0.02	0.05	0.12	0.02	0.10
Mary Creek	Pathway	0021_SW010	0021_SW010_250912	12 Sep 2025	ES2528885		10.5	1.74	0.11	13.0	12.7	-	12.2	-	0.06	<0.02	-	0.16	-	0.11
Mary Creek	Pathway	0021_SW044	MC_SW02_180323	23 Mar 2018	ES1809241		0.562	0.446	0.0205	1.13	1.07	-	1.01	-	0.0115	0.0030	-	0.0260	-	0.0273
Mary Creek	Pathway	0021_SW044	MC_SW02_180430	30 Apr 2018	ES1812871		1.48	2.95	0.101	5.22	4.84	-	4.43	-	0.147	<0.0020 ^{#2}	-	0.0940	-	0.291
Mary Creek	Pathway	0021_SW044	0021_SW044_220512	12 May 2022	ES2216861		0.54	0.21	<0.01	0.77	0.77	-	0.75	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_SW044	0021_SW044_221011	11 Oct 2022	ES2237106		0.25	0.09	<0.01	0.34	0.34	-	0.34	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_SW044	0021_SW044_230418	18 Apr 2023	ES2313364		0.43	0.24	0.01	0.68	0.68	-	0.67	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_SW044	0021_SW044_231017	17 Oct 2023	ES2336399		0.35	0.33	0.01	0.74	0.71	-	0.68	-	<0.02	<0.02	-	<0.02	-	0.03
Mary Creek	Pathway	0021_SW044	0021_QC203_240409	09 Apr 2024	348825		1.7	0.87	0.04	2.8	-	1.7	2.6	-	0.03	<0.02	-	0.06	-	0.04
Mary Creek	Pathway	0021_SW044	0021_SW044_240409	09 Apr 2024	ES2412012		1.23	0.67	0.02	2.05	1.97	-	1.90	-	0.02	<0.02	-	0.04	-	0.04
Mary Creek	Pathway	0021_SW044	0021_SW044_241028	28 Oct 2024	ES2435541		0.05	0.03	<0.01	0.08	0.08	-	0.08	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_SW044	0021_SW044_250401	01 Apr 2025	ES2510622		1.02	0.62	0.02	1.76	1.69	-	1.64	-	<0.02	<0.02	-	0.03	-	0.04
Mary Creek	Pathway	0021_SW044	0021_SW044_251021	21 Oct 2025	ES2533538		0.13	0.04	<0.01	0.17	0.17	-	0.17	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_SW045	MC_SW03_180323	23 Mar 2018	ES1809241		0.0181	0.0193	0.0006	0.0404	0.0394	-	0.0374	-	0.0006	<0.0005	-	<0.0005	-	0.0010
Mary Creek	Pathway	0021_SW045	MC_SW03_180430	30 Apr 2018	ES1812871		0.0072	0.0080	<0.0020 ^{#2}	0.0152	0.0152	-	0.0152	-	<0.0020 ^{#2}	<0.0020 ^{#2}	-	<0.0020 ^{#2}	-	<0.0020 ^{#2}
Mary Creek	Pathway	0021_SW045	0021_SW045_220512	12 May 2022	ES2216861		0.01	0.02	<0.01	0.03	0.03	-	0.03	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_SW045	0021_SW045_221011	11 Oct 2022	ES2237106		0.01	<0.01	<0.01	0.01	0.01	-	0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_SW045	0021_SW045_230418	18 Apr 2023	ES2313364		<0.01	0.01	<0.01	0.01	0.01	-	0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_SW045	0021_QC102_231017	17 Oct 2023	ES2336399		<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_SW045	0021_QC202_231017	17 Oct 2023	335876		<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	-	<0.01	<0.02	-	<0.01	-	<0.01
Mary Creek	Pathway	0021_SW045	0021_SW045_231017	17 Oct 2023	ES2336399		<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_SW045	0021_SW045_240409	09 Apr 2024	ES2412012		0.02	0.03	<0.01	0.05	0.05	-	0.05	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_SW045	0021_SW045_241023	23 Oct 2024	ES2435078		<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_SW045	0021_SW045_250401	01 Apr 2025	ES2510622		0.02	0.02	<0.01	0.04	0.04	-	0.04	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_SW045	0021_SW045_251021	21 Oct 2025	ES2533538		<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_SW048	MC_SW06_180406	06 Apr 2018	ES1810551		0.0140	0.0097	<0.0005	0.0248	0.0242	-	0.0237	-	<0.0005	<0.0005	-	<0.0005	-	0.0006
Mary Creek	Pathway	0021_SW048	0021_SW048_221012	12 Oct 2022	ES2237106		0.21	0.01	<0.01	0.22	0.22	-	0.22	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_SW048	0021_SW048_230419	19 Apr 2023	ES2313364		0.18	0.08	<0.01	0.26	0.26	-	0.26	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_SW048	0021_SW048_231017	18 Oct 2023	ES2336399		0.02	<0.01	<0.01	0.02	0.02	-	0.02	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_SW048	0021_SW048_240410	10 Apr 2024	ES2412012		0.03	0.06	<0.01	0.09	0.09	-	0.09	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_SW048	0021_SW048_241025	25 Oct 2024	ES2435541		0.02	0.01	<0.01	0.03	0.03	-	0.03	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_SW048	0021_SW048_250403	03 Apr 2025	ES2510622		0.01	0.03	<0.01	0.04	0.04	-	0.04	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_SW048	0021_SW048_251021	21 Oct 2025	ES2533538		0.02	0.03	<0.01	0.05	0.05	-	0.05	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_SW053	MC_SW11_180430	30 Apr 2018	ES1812871		2.36	4.23	0.135	7.66	7.13	-	6.59	-	0.174	0.0024	-	0.145	-	0.385
Mary Creek	Pathway	0021_SW053	0021_SW053_220512	12 May 2022	ES2216861		1.25	0.44	0.02	1.81	1.75	-	1.69	-	<0.02	<0.02	-	0.03	-	0.03
Mary Creek	Pathway	0021_SW053	0021_SW053_221011	11 Oct 2022	ES2237106		0.75	0.26	0.02	1.07	1.07	-	1.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_SW053	0021_SW053_230202	02 Feb 2023	ES2303445		1.28	2.42	0.06	4.15	3.88	-	3.70	-	0.09	<0.02	-	0.10	-	0.17
Mary Creek	Pathway	0021_SW053	0021_QC200_230309	09 Mar 2023	972744		1.2 ^{#1}	1.3 ^{#1}	0.05 ^{#1}	2.79	2.67	1.25	2.5	2.55	0.04	<0.01	<0.01	0.05	0.01	0.06
Mary Creek	Pathway	0021_SW053	0021_SW053_230309	09 Mar 2023	ES2308203		1.01	1.00	0.04	2.32	2.15	-	2.01	-	0.04	<0.02	-	0.10	-	0.07
Mary Creek	Pathway	0021_SW053	0021_QC101_230418	18 Apr 2023	ES2313364		0.93	0.70	0.02	1.74	1.67	-	1.63	-	<0.02	<0.02	-	0.03	-	0.04
Mary Creek	Pathway	0021_SW053	0021_QC201_230418	18 Apr 2023	321517		1.0	0.69	0.03	1.9	-	1.0	1.7	-	0.02	<0.02	-	0.05	-	0.04
Mary Creek	Pathway	0021_SW053	0021_SW053_230418	18 Apr 2023	ES2313364		0.91	0.48	0.03	1.52	1.46	-	1.39	-	<0.02	<0.02	-	0.03	-	0.03
Mary Creek	Pathway	0021_SW053	0021_SW053_230501	01 May 2023	ES2314437		<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02



Appendix B
Table B5f
Historical Water Analytical Results - Mary Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids					
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	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)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)
	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	0.0001	0.0005	0.0005	0.0003	0.0003	0.001	0.0003	0.001	0.0005	0.0005	0.01	0.0005	0.001	0.0005
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13		220											
PFAS NEMP 3.0 2025 Recreational water quality	2	2	10				2							

Catchment	SPR	Location	Field ID	Date	Lab Report No.														
Mary Creek	Pathway	0021_SW053	0021_QC200_230606	06 Jun 2023	998496	0.55 ^{#1}	0.47 ^{#1}	0.02 ^{#1}	1.17	1.12	0.57	1.02	1.04	0.02	<0.01	<0.01	0.02 ^{#1}	<0.01	0.03 ^{#1}
Mary Creek	Pathway	0021_SW053	0021_SW053_230606	06 Jun 2023	ES2319084	0.67	0.59	0.02	1.41	1.34	-	1.26	-	<0.02	<0.02	-	0.03	-	0.04
Mary Creek	Pathway	0021_SW053	0021_QC200_230808	08 Aug 2023	1016825	0.92	1.4	0.05	2.68	2.48	0.97	2.32	2.37	0.07	<0.01	<0.01	0.06	0.02	0.12
Mary Creek	Pathway	0021_SW053	0021_SW053_230808	08 Aug 2023	ES2326813	0.95	1.40	0.04	2.70	2.49	-	2.35	-	0.07	<0.02	-	0.07	-	0.14
Mary Creek	Pathway	0021_SW053	0021_SW053_231017	17 Oct 2023	ES2336399	0.54	0.54	0.02	1.22	1.15	-	1.08	-	0.02	<0.02	-	0.03	-	0.04
Mary Creek	Pathway	0021_SW053	0021_QC100_231212	12 Dec 2023	ES2343587	1.21	0.95	0.05	2.44	2.32	-	2.16	-	0.03	<0.02	-	0.06	-	0.06
Mary Creek	Pathway	0021_SW053	0021_SW053_231212	12 Dec 2023	ES2343587	1.17	0.90	0.05	2.34	2.22	-	2.07	-	0.03	<0.02	-	0.06	-	0.06
Mary Creek	Pathway	0021_SW053	0021_QC103_240409	09 Apr 2024	ES2412012	1.73	1.08	0.04	3.05	2.93	-	2.81	-	0.04	<0.02	-	0.06	-	0.06
Mary Creek	Pathway	0021_SW053	0021_SW053_240409	09 Apr 2024	ES2412012	1.66	0.96	0.04	2.85	2.74	-	2.62	-	0.03	<0.02	-	0.06	-	0.05
Mary Creek	Pathway	0021_SW053	0021_SW053_241023	23 Oct 2024	ES2435078	0.38	0.20	<0.01	0.58	0.58	-	0.58	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_SW053	0021_QC100_250129	29 Jan 2025	ES2503552	0.99	1.63	0.05	2.98	2.79	-	2.62	-	0.06	<0.02	<0.02	0.07	<0.02	0.12
Mary Creek	Pathway	0021_SW053	0021_QC200_250129	29 Jan 2025	1187025	2.7 ^{#1}	2.8 ^{#1}	0.09 ^{#1}	6.11	5.8	2.79	5.5	5.59	0.08	<0.01	<0.01	0.13 ^{#1}	0.02	0.16 ^{#1}
Mary Creek	Pathway	0021_SW053	0021_SW053_250129	29 Jan 2025	ES2503552	1.15	1.61	0.05	3.11	2.93	-	2.76	-	0.06	<0.02	<0.02	0.06	<0.02	0.12
Mary Creek	Pathway	0021_SW053	0021_SW053_250401	01 Apr 2025	ES2510622	1.29	0.85	0.03	2.32	2.23	-	2.14	-	0.02	<0.02	-	0.05	-	0.04
Mary Creek	Pathway	0021_SW053	0021_SW053_250805	05 Aug 2025	ES2524252	0.74	0.30	0.02	1.10	1.08	-	1.04	-	<0.02	<0.02	-	0.02	-	<0.02
Mary Creek	Pathway	0021_SW053	0021_SW053_250825	25 Aug 2025	ES2526742	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Mary Creek	Pathway	0021_SW053	0021_SW053_250912	12 Sep 2025	ES2528885	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Pathway	0021_SW053	0021_SW053_251021	21 Oct 2025	ES2533538	0.60	0.39	0.02	1.10	1.06	-	0.99	-	<0.02	<0.02	-	0.02	-	0.02
Mary Creek	Receptor	0021_SW043	MC_SW01_180320	20 Mar 2018	ES1808818	0.886	0.803	0.0225	1.90	1.79	-	1.69	-	0.0305	<0.0005	-	0.0437	-	0.0669
Mary Creek	Receptor	0021_SW043	MC_SW01_180501	01 May 2018	ES1812871	1.60	2.83	0.0844	5.16	4.81	-	4.43	-	0.137	<0.0020 ^{#2}	-	0.0998	-	0.254
Mary Creek	Receptor	0021_SW043	0021_SW043_220512	12 May 2022	ES2216861	0.47	0.23	<0.01	0.70	0.70	-	0.70	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Receptor	0021_SW043	0021_SW043_221012	12 Oct 2022	ES2237106	0.17	0.06	<0.01	0.23	0.23	-	0.23	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Receptor	0021_SW043	0021_SW043_230418	18 Apr 2023	ES2313364	0.30	0.18	<0.01	0.48	0.48	-	0.48	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Receptor	0021_SW043	0021_SW043_231017	17 Oct 2023	ES2336399	0.09	0.08	<0.01	0.17	0.17	-	0.17	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Receptor	0021_SW043	0021_SW043_240409	09 Apr 2024	ES2412012	0.80	0.57	0.02	1.50	1.44	-	1.37	-	0.02	<0.02	-	0.03	-	0.03
Mary Creek	Receptor	0021_SW043	0021_QC106_241023	23 Oct 2024	ES2435078	0.12	0.06	<0.01	0.18	0.18	-	0.18	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Receptor	0021_SW043	0021_QC206_241023	23 Oct 2024	1154751	0.14	0.06	<0.01	0.2	0.2	0.14	0.2	0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mary Creek	Receptor	0021_SW043	0021_SW043_241023	23 Oct 2024	ES2435078	0.12	0.06	<0.01	0.18	0.18	-	0.18	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Receptor	0021_SW043	0021_SW043_250129	29 Jan 2025	ES2503552	0.33	0.45	0.02	0.84	0.80	-	0.78	-	<0.02	<0.02	<0.02	<0.02	<0.02	0.04
Mary Creek	Receptor	0021_SW043	0021_SW043_250401	01 Apr 2025	ES2510622	0.99	0.59	0.02	1.69	1.63	-	1.58	-	<0.02	<0.02	-	0.03	-	0.03
Mary Creek	Receptor	0021_SW043	0021_QC102_251021	21 Oct 2025	ES2533538	0.17	0.09	<0.01	0.26	0.26	-	0.26	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Receptor	0021_SW043	0021_QC202_251021	21 Oct 2025	1285374	0.15 ^{#1}	0.08 ^{#1}	<0.01	0.2	0.23	-	0.23	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mary Creek	Receptor	0021_SW043	0021_SW043_251021	21 Oct 2025	ES2533538	0.18	0.10	<0.01	0.28	0.28	-	0.28	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Receptor	0021_SW052	MC_SW10_180320	20 Mar 2018	ES1808818	0.0014	0.0005	<0.0005	0.0019	0.0019	-	0.0019	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005
Mary Creek	Receptor	0021_SW052	MC_SW10_180328	28 Mar 2018	ES1809328	0.902	0.659	0.0232	1.73	1.64	-	1.56	-	0.0202	<0.0005	-	0.0344	-	0.0521
Mary Creek	Receptor	0021_SW052	0021_SW052_220512	12 May 2022	ES2216861	0.47	0.20	<0.01	0.67	0.67	-	0.67	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Receptor	0021_SW052	0021_SW052_221012	12 Oct 2022	ES2237106	0.02	<0.01	<0.01	0.02	0.02	-	0.02	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Receptor	0021_SW052	0021_SW052_230418	18 Apr 2023	ES2313364	0.30	0.11	<0.01	0.41	0.41	-	0.41	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Receptor	0021_SW052	0021_SW052_231017	17 Oct 2023	ES2336399	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Receptor	0021_SW052	0021_SW052_240409	09 Apr 2024	ES2412012	<0.01	0.35	0.01	0.39	0.36	-	0.35	-	<0.02	<0.02	-	0.03	-	<0.02
Mary Creek	Receptor	0021_SW052	0021_SW052_241023	23 Oct 2024	ES2435078	0.06	0.05	<0.01	0.11	0.11	-	0.11	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Receptor	0021_SW052	0021_SW052_250129	29 Jan 2025	ES2503552	0.21	0.78	0.02	1.12	1.04	-	0.99	-	0.03	<0.02	<0.02	0.02	<0.02	0.06
Mary Creek	Receptor	0021_SW052	0021_SW052_250401	01 Apr 2025	ES2510622	1.04	0.57	0.02	1.74	1.68	-	1.61	-	0.02	<0.02	-	0.03	-	0.03
Mary Creek	Receptor	0021_SW052	0021_SW052_251021	21 Oct 2025	ES2533538	0.05	0.03	<0.01	0.08	0.08	-	0.08	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Receptor	0021_SW211	0021_SW211_241023	23 Oct 2024	ES2435078	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Receptor	0021_SW211	0021_SW211_250403	03 Apr 2025	ES2510623	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02
Mary Creek	Receptor	0021_SW211	0021_SW211_251021	21 Oct 2025	ES2533538	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02

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 Reported Analyte LOR is higher than Requested Analyte LOR



Appendix B
Table B5f
Historical Water Analytical Results - Mary Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Carboxylic Acids													
	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTTrDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluoro-n-hexadecanoic acid (PFHxDA)	N-Ethylperfluorooctane sulfonamide (EtFOSA)	
	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	0.001	0.002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.05	0.001	
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%														
PFAS NEMP 3.0 2025 Recreational water quality														

Catchment	SPR	Location	Field ID	Date	Lab Report No.												
Mary Creek	Source	0021_MW061	0021_MW061_210621	21 Jun 2021	ES2123994	-	<0.1	<0.02	<0.02	0.08	0.62	<0.02	0.10	<0.05	<0.02	<0.02	-
Mary Creek	Source	0021_MW061	0021_QC211_210623	23 Jun 2021	807414	<0.01	0.06	<0.01	<0.01	0.10	0.65	<0.01	0.11	<0.01	<0.01	<0.01	-
Mary Creek	Source	0021_MW061	0021_MW061_240411	11 Apr 2024	ES2411994	-	<0.1	<0.02	<0.02	0.05	0.32	<0.02	0.05	<0.05	<0.02	<0.02	-
Mary Creek	Source	0021_MW061	0021_MW061_241024	24 Oct 2024	ES2435541	-	<0.1	<0.02	<0.02	0.04	0.30	<0.02	0.05	<0.05	<0.02	<0.02	-
Mary Creek	Source	0021_MW061	0021_MW061_250424	24 Apr 2025	ES2512435	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Source	0021_MW061	0021_MW061_251023	23 Oct 2025	ES2533521	-	<0.1	<0.02	<0.02	0.05	0.32	<0.02	0.06	<0.05	<0.02	<0.02	-
Mary Creek	Source	0021_MW063	0021_MW063_210622	22 Jun 2021	ES2123994	-	<0.1	<0.02	<0.02	<0.02	0.06	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Source	0021_MW063	0021_MW063_211122	22 Nov 2021	ES2142514	-	<0.1	<0.02	<0.02	<0.02	0.10	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Source	0021_MW063	0021_QC201_211122	22 Nov 2021	845848	<0.01	<0.05	<0.01	<0.01	<0.01	0.07	<0.01	0.01	<0.01	<0.01	<0.01	-
Mary Creek	Source	0021_MW063	0021_MW063_241025	25 Oct 2024	ES2435541	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Source	0021_MW063	0021_QC159_241025	25 Oct 2024	ES2435541	-	<0.1	<0.02	<0.02	<0.02	0.06	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Source	0021_MW063	0021_QC259_241025	25 Oct 2024	1156160	-	<0.05	<0.01	<0.01	0.04	0.08	<0.01	0.02	<0.01	<0.01	<0.01	-
Mary Creek	Source	0021_MW063	0021_MW063_250129	29 Jan 2025	ES2503552	-	<0.1	<0.02	<0.02	<0.02	0.09	<0.02	0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW063	0021_MW063_250403	03 Apr 2025	ES2510113	-	<0.1	<0.02	<0.02	<0.02	0.08	<0.02	0.02	<0.05	<0.02	<0.02	-
Mary Creek	Source	0021_MW063	0021_MW063_251022	22 Oct 2025	ES2533521	-	<0.1	<0.02	<0.02	<0.02	0.09	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Source	0021_MW064	0021_MW064_210622	22 Jun 2021	ES2123994	-	0.2	<0.02	<0.02	0.30	2.02	<0.02	0.43	<0.05	<0.02	<0.02	-
Mary Creek	Source	0021_MW064	0021_QC212_210623	23 Jun 2021	807414	0.01	0.23	<0.01	<0.01	0.34	2.2	<0.01	0.43	<0.01	<0.01	<0.01	-
Mary Creek	Source	0021_MW064	0021_MW064_211122	22 Nov 2021	ES2142514	-	<0.1	<0.02	<0.02	0.02	0.33	<0.02	0.05	<0.05	<0.02	<0.02	-
Mary Creek	Source	0021_MW064	0021_QC101_211122	22 Nov 2021	ES2142514	-	<0.1	<0.02	<0.02	0.02	0.32	<0.02	0.05	<0.05	<0.02	<0.02	-
Mary Creek	Source	0021_MW064	0021_MW064_241025	25 Oct 2024	ES2435541	-	<0.1	<0.02	<0.02	<0.02	0.19	<0.02	0.05	<0.05	<0.02	<0.02	-
Mary Creek	Source	0021_MW064	0021_MW064_250403	03 Apr 2025	ES2510113	-	<0.1	<0.02	<0.02	<0.02	0.14	<0.02	0.03	<0.05	<0.02	<0.02	-
Mary Creek	Source	0021_MW064	0021_MW064_251022	22 Oct 2025	ES2533521	-	<0.1	<0.02	<0.02	<0.02	0.06	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Source	0021_MW064	0021_QC165_251022	22 Oct 2025	ES2533538	-	<0.1	<0.02	<0.02	<0.02	0.06	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Source	0021_MW064	0021_QC265_251022	22 Oct 2025	1285374	-	<0.05	<0.01	<0.01	<0.01	0.06	<0.01	0.02	<0.01	<0.01	<0.01	-
Mary Creek	Source	0021_MW065	0021_MW065_210622	22 Jun 2021	ES2123994	-	<0.1	<0.02	<0.02	0.12	0.94	<0.02	0.22	<0.05	<0.02	<0.02	-
Mary Creek	Source	0021_MW065	0021_MW065_211122	22 Nov 2021	ES2142514	-	<0.1	<0.02	<0.02	0.02	0.30	<0.02	0.06	<0.05	<0.02	<0.02	-
Mary Creek	Source	0021_MW065	0021_MW065_241024	24 Oct 2024	ES2435541	-	<0.1	<0.02	<0.02	<0.02	0.11	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Source	0021_MW065	0021_MW065_250129	29 Jan 2025	ES2503552	-	<0.1	<0.02	<0.02	0.02	0.50	<0.02	0.13	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW065	0021_MW065_250403	03 Apr 2025	ES2510113	-	<0.1	<0.02	<0.02	<0.02	0.26	<0.02	0.06	<0.05	<0.02	<0.02	-
Mary Creek	Source	0021_MW065	0021_MW065_251022	22 Oct 2025	ES2533521	-	<0.1	<0.02	<0.02	<0.02	0.17	<0.02	0.04	<0.05	<0.02	<0.02	-
Mary Creek	Source	0021_MW101	A_MW01	28 Apr 2017	ES1710200	-	<0.002	<0.0005	<0.0005	0.0023	0.0241	<0.0005	0.0044	<0.0005	<0.0005	<0.0005	-
Mary Creek	Source	0021_MW101	0021_MW101_200909	09 Sep 2020	ES2031960	-	0.003	<0.0005	<0.0005	0.0011	0.0149	<0.0005	0.0029	<0.0005	<0.0005	<0.0005	-
Mary Creek	Source	0021_MW101	0021_MW101_211019	19 Oct 2021	ES2138639	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Source	0021_MW101	0021_MW101_220405	05 Apr 2022	ES2212442	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Source	0021_MW101	0021_MW101_221013	13 Oct 2022	ES2237106	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Source	0021_MW101	0021_MW101_230420	20 Apr 2023	ES2313364	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Source	0021_MW101	0021_MW101_231019	19 Oct 2023	ES2336398	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Source	0021_MW101	0021_MW101_240410	10 Apr 2024	ES2411994	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Source	0021_MW101	0021_MW101_241024	24 Oct 2024	ES2435541	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Source	0021_MW101	0021_MW101_250404	04 Apr 2025	ES2510113	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Source	0021_MW101	0021_MW101_251023	23 Oct 2025	ES2533521	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Source	0021_MW103	A_MW03	28 Apr 2017	ES1710200	-	<0.020	<0.0200	<0.0200	0.836	6.71	<0.0200	0.972	<0.0500	<0.0200	<0.0200	-
Mary Creek	Source	0021_MW103	A_MW03_180502	02 May 2018	ES1812871	-	0.5	<0.02	<0.02	0.75	5.27	0.03	0.84	<0.05	<0.02	<0.02	-
Mary Creek	Source	0021_MW103	JBRF-A-MW03-2-200624	24 Jun 2020	727660	0.07 ^{#1}	0.21	<0.01	<0.01	0.08	1.0	<0.01	0.18	<0.01	<0.01	<0.01	-
Mary Creek	Source	0021_MW103	0021_MW103_210622	22 Jun 2021	ES2123994	-	<0.1	<0.02	<0.02	0.05	0.47	<0.02	0.08	<0.05	<0.02	<0.02	-
Mary Creek	Source	0021_MW103	0021_QC114_210622	22 Jun 2021	ES2123994	-	<0.1	<0.02	<0.02	0.06	0.57	<0.02	0.10	<0.05	<0.02	<0.02	-
Mary Creek	Source	0021_MW103	0021_MW103_211019	19 Oct 2021	ES2138639	-	0.1	<0.02	<0.02	0.07	0.79	<0.02	0.15	<0.05	<0.02	<0.02	-
Mary Creek	Source	0021_MW103	0021_MW103_211122	22 Nov 2021	ES2142514	-	0.1	<0.02	<0.02	0.09	1.05	<0.02	0.16	<0.05	<0.02	<0.02	-
Mary Creek	Source	0021_MW103	0021_MW103_220406	06 Apr 2022	ES2212442	-	<0.1	<0.02	<0.02	0.07	0.96	<0.02	0.13	<0.05	<0.02	<0.02	-
Mary Creek	Source	0021_MW103	0021_MW103_221013	13 Oct 2022	ES2237106	-	<0.1	<0.02	<0.02	0.06	0.52	<0.02	0.10	<0.05	<0.02	<0.02	-
Mary Creek	Source	0021_MW103	0021_MW103_230420	20 Apr 2023	ES2313364	-	0.1	<0.02	<0.02	0.09	0.83	<0.02	0.18	<0.05	<0.02	<0.02	-



Appendix B
Table B5f
Historical Water Analytical Results - Mary Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Carboxylic Acids													
	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTTrDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluoro-n-hexadecanoic acid (PFHxDA)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	
	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	0.001	0.002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.05	0.001	
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%														
PFAS NEMP 3.0 2025 Recreational water quality														

Catchment	SPR	Location	Field ID	Date	Lab Report No.													
Mary Creek	Source	0021_MW103	0021_MW103_231018	18 Oct 2023	ES2336398	-	<0.1	<0.02	<0.02	0.05	0.60	<0.02	0.10	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_MW103	0021_MW103_240411	11 Apr 2024	ES2411994	-	0.1	<0.02	<0.02	0.09	0.74	<0.02	0.11	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_MW103	0021_MW103_241025	25 Oct 2024	ES2435541	-	<0.1	<0.02	<0.02	0.04	0.59	<0.02	0.09	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_MW103	0021_MW103_250403	03 Apr 2025	ES2510113	-	<0.1	<0.02	<0.02	0.07	0.66	<0.02	0.12	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_MW103	0021_MW103_251022	22 Oct 2025	ES2533521	-	0.5	<0.02	<0.02	1.54	9.56	0.04	1.33	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_MW105	A_MW05	28 Apr 2017	ES1710200	-	<0.020	<0.0200	<0.0200	0.0520	0.402	<0.0200	<0.0200	<0.0500	<0.0200	<0.0200	-	<0.050
Mary Creek	Source	0021_MW105	0021_MW105_211019	19 Oct 2021	ES2138639	-	<0.1	<0.02	<0.02	0.12	1.02	<0.02	0.17	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_MW105	0021_QC200_211019	19 Oct 2021	281322	-	0.1	<0.02	<0.05	0.13	0.95	<0.01	0.2	<0.5	<0.1	<0.02	-	<0.1
Mary Creek	Source	0021_MW105	0021_MW105_220406	06 Apr 2022	ES2212442	-	0.2	<0.02	<0.02	0.17	1.62	<0.02	0.22	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_MW105	0021_MW105_221013	13 Oct 2022	ES2237106	-	<0.1	<0.02	<0.02	0.11	0.59	<0.02	0.12	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_MW105	0021_MW105_230420	20 Apr 2023	ES2313364	-	<0.1	<0.02	<0.02	0.16	0.90	<0.02	0.19	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_MW105	0021_MW105_231019	19 Oct 2023	ES2336398	-	<0.1	<0.02	<0.02	0.08	0.51	<0.02	0.06	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_MW105	0021_MW105_240411	11 Apr 2024	ES2411994	-	<0.1	<0.02	<0.02	0.14	0.86	<0.02	0.07	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_MW105	0021_MW105_241022	22 Oct 2024	ES2435078	-	<0.1	<0.02	<0.02	0.06	0.65	<0.02	0.10	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_MW105	0021_MW105_250129	29 Jan 2025	ES2503552	-	<0.1	<0.02	<0.02	0.07	0.44	<0.02	0.04	<0.05	<0.02	<0.02	<0.05	<0.05
Mary Creek	Source	0021_MW105	0021_MW105_250403	03 Apr 2025	ES2510113	-	<0.1	<0.02	<0.02	0.04	0.27	<0.02	0.03	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_MW105	0021_QC256_250403	03 Apr 2025	1210052	-	<0.05	<0.01	<0.01	0.04	0.30	<0.01	0.04	<0.01	<0.01	<0.01	-	<0.05
Mary Creek	Source	0021_MW105	0021_MW105_251023	23 Oct 2025	ES2533521	-	<0.1	<0.02	<0.02	0.07	0.57	<0.02	0.08	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_MW106	A_MW06	27 Apr 2017	ES1710200	-	0.588	<0.0200	<0.0200	0.386	2.88	<0.0200	0.292	<0.0500	<0.0200	<0.0200	-	<0.050
Mary Creek	Source	0021_MW106	JBRF-A-MW06-2-200624	24 Jun 2020	727660	0.35 ^{#1}	0.70	<0.01	<0.01	1.5	11	0.05 ^{#1}	1.6	<0.01	<0.01	<0.01	-	<0.05
Mary Creek	Source	0021_MW106	0021_MW106_200909	09 Sep 2020	ES2031960	-	0.341	0.0037	<0.0016 ^{#2}	1.01	9.73	0.0365	1.10	<0.0040 ^{#2}	<0.0016 ^{#2}	<0.0016 ^{#2}	-	<0.004 ^{#2}
Mary Creek	Source	0021_MW106	0021_QC123_200909	09 Sep 2020	ES2031960	-	0.434	0.0050	<0.0016 ^{#2}	1.06	9.30	0.0389	1.37	<0.0040 ^{#2}	<0.0016 ^{#2}	<0.0016 ^{#2}	-	<0.004 ^{#2}
Mary Creek	Source	0021_MW106	0021_MW106_211019	19 Oct 2021	ES2138639	-	0.2	<0.02	<0.02	0.48	5.15	0.04	0.64	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_MW106	0021_MW106_220405	05 Apr 2022	ES2212442	-	0.2	<0.02	<0.02	0.29	3.68	0.02	0.46	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_MW106	0021_QC104_220405	05 Apr 2022	ES2212442	-	0.3	<0.02	<0.02	0.44	6.23	0.03	0.72	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_MW106	0021_MW106_221013	13 Oct 2022	ES2237106	-	0.3	<0.02	<0.02	0.71	6.34	0.03	0.77	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_MW106	0021_QC210_221013	13 Oct 2022	308187	-	0.28	<0.02	<0.05	0.82	6.0	0.04	0.74	<0.5	<0.1	<0.02	-	<0.1
Mary Creek	Source	0021_MW106	0021_MW106_230420	20 Apr 2023	ES2313364	-	0.7	<0.02	<0.02	1.49	14.7	0.10	1.92	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_MW106	0021_MW106_231019	19 Oct 2023	ES2336398	-	0.5	<0.02	<0.02	1.26	10.8	0.06	1.36	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_MW106	0021_MW106_240410	10 Apr 2024	ES2411994	-	0.2	<0.02	<0.02	0.40	4.37	0.03	0.45	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_MW106	0021_MW106_241024	24 Oct 2024	ES2435541	-	0.4	<0.02	<0.02	0.97	8.50	0.05	1.17	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_MW106	0021_MW106_250129	29 Jan 2025	ES2503552	-	0.3	<0.02	<0.02	0.55	4.97	0.05	0.70	<0.05	<0.02	<0.02	<0.05	<0.05
Mary Creek	Source	0021_MW106	0021_MW106_250404	04 Apr 2025	ES2510113	-	0.2	<0.02	<0.02	0.28	2.76	<0.02	0.47	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_MW106	0021_MW106_251022	22 Oct 2025	ES2533521	-	0.2	<0.02	<0.02	0.52	4.23	0.03	0.48	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_MW107	A_MW07	08 May 2017	ES1711220	-	<0.002	<0.0005	<0.0005	0.0946	1	0.0042	0.305	<0.0005	<0.0005	<0.0005	-	<0.001
Mary Creek	Source	0021_MW107	0021_MW107_210622	22 Jun 2021	ES2123994	-	<0.1	<0.02	<0.02	0.06	0.42	<0.02	0.09	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_MW107	0021_MW107_211019	19 Oct 2021	ES2138639	-	<0.1	<0.02	<0.02	0.07	0.67	<0.02	0.12	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_MW107	0021_QC100_211019	19 Oct 2021	ES2138639	-	<0.1	<0.02	<0.02	0.07	0.62	<0.02	0.12	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_MW107	0021_MW107_211122	22 Nov 2021	ES2142514	-	<0.1	<0.02	<0.02	0.05	0.56	<0.02	0.11	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_MW107	0021_MW107_220406	06 Apr 2022	ES2212442	-	<0.1	<0.02	<0.02	0.04	0.42	<0.02	0.08	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_MW107	0021_MW107_221013	13 Oct 2022	ES2237106	-	<0.1	<0.02	<0.02	0.05	0.38	<0.02	0.08	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_MW107	0021_MW107_230420	20 Apr 2023	ES2313364	-	<0.1	<0.02	<0.02	0.06	0.46	<0.02	0.10	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_MW107	0021_QC110_230420	20 Apr 2023	ES2313364	-	<0.1	<0.02	<0.02	0.06	0.17	<0.02	0.08	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_MW107	0021_QC210_230420	20 Apr 2023	321517	-	0.04	<0.02	<0.05	0.04	0.40	<0.01	0.09	<0.5	<0.1	<0.02	-	<0.1
Mary Creek	Source	0021_MW107	0021_MW107_231018	18 Oct 2023	ES2336398	-	<0.1	<0.02	<0.02	0.07	0.57	<0.02	0.11	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_MW107	0021_MW107_240411	11 Apr 2024	ES2411994	-	<0.1	<0.02	<0.02	0.06	0.43	<0.02	0.08	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_MW107	0021_QC112_240411	11 Apr 2024	ES2411994	-	<0.1	<0.02	<0.02	0.05	0.47	<0.02	0.10	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_MW107	0021_QC212_240411	11 Apr 2024	348825	-	0.04	<0.02	<0.05	0.05	0.40	<0.01	0.08	<0.5	<0.1	<0.02	-	<0.1
Mary Creek	Source	0021_MW107	0021_MW107_241024	24 Oct 2024	ES2435541	-	<0.1	<0.02	<0.02	0.09	0.82	<0.02	0.16	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_MW107	0021_MW107_250403	03 Apr 2025	ES2510113	-	<0.1	<0.02	<0.02	0.05	0.37	<0.02	0.11	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_MW107	0021_QC156_250403	03 Apr 2025	ES2510113	-	<0.1	<0.02	<0.02	0.04	0.34	<0.02	0.12	<0.05	<0.02	<0.02	-	<0.05



Appendix B
Table B5f
Historical Water Analytical Results - Mary Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

EQL	PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	PFAS NEMP 3.0 2025 Recreational water quality	PFAS - Perfluoroalkyl Carboxylic Acids												N-Ethyl perfluorooctane sulfonamide (EtFOSA)
			Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTTrDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluoro-n-hexadecanoic acid (PFHxDA)	
			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
			0.001	0.002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.05	0.001

Catchment	SPR	Location	Field ID	Date	Lab Report No.												
Mary Creek	Source	0021_MW107	0021_MW107_251023	23 Oct 2025	ES2533521	-	0.1	<0.02	<0.02	0.06	0.42	<0.02	0.09	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW110	B_MW01	28 Apr 2017	ES1710200	-	<0.002	<0.0005	<0.0005	<0.0005	0.0068	<0.0005	0.0021	<0.0005	<0.0005	<0.0005	<0.001
Mary Creek	Source	0021_MW110	0021_MW110_210622	22 Jun 2021	ES2123994	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW110	0021_MW110_211020	20 Oct 2021	ES2138639	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW110	0021_MW110_211122	22 Nov 2021	ES2142514	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW110	0021_MW110_220407	07 Apr 2022	ES2212442	-	<0.1	<0.02	<0.02	<0.02	0.08	<0.02	0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW110	0021_MW110_221013	13 Oct 2022	ES2237106	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW110	0021_MW110_230420	20 Apr 2023	ES2313364	-	<0.1	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW110	0021_MW110_231018	18 Oct 2023	ES2336398	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW110	0021_MW110_240410	10 Apr 2024	ES2411994	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW110	0021_MW110_241025	25 Oct 2024	ES2435541	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW110	0021_MW110_250130	29 Jan 2025	ES2503552	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW110	0021_QC103_250130	30 Jan 2025	ES2503552	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW110	0021_QC203_250130	30 Jan 2025	1187025	-	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.2
Mary Creek	Source	0021_MW110	0021_MW110_250401	01 Apr 2025	ES2510113	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW110	0021_MW110_251023	23 Oct 2025	ES2533521	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW111	B_MW02	28 Apr 2017	ES1710200	-	<0.002	<0.0005	<0.0005	0.0009	0.0040	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
Mary Creek	Source	0021_MW111	0021_MW111_210622	22 Jun 2021	ES2123994	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW111	0021_MW111_211020	20 Oct 2021	ES2138639	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW111	0021_MW111_211122	22 Nov 2021	ES2142514	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW111	0021_MW111_220407	07 Apr 2022	ES2212442	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW111	0021_MW111_221013	13 Oct 2022	ES2237106	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW111	0021_MW111_230420	20 Apr 2023	ES2313364	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW111	0021_MW111_231018	18 Oct 2023	ES2336398	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW111	0021_MW111_240410	10 Apr 2024	ES2411994	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW111	0021_MW111_241025	25 Oct 2024	ES2435541	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW111	0021_MW111_250130	30 Jan 2025	ES2503552	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW111	0021_MW111_250408	08 Apr 2025	ES2510113	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW111	0021_MW111_251023	23 Oct 2025	ES2533521	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW150	0021_MW150_200813	13 Aug 2020	ES2028499	-	0.030	<0.0016 ^{#2}	<0.0016 ^{#2}	0.0478	0.266	0.0034	0.0589	<0.0040 ^{#2}	<0.0016 ^{#2}	<0.0016 ^{#2}	<0.004 ^{#2}
Mary Creek	Source	0021_MW150	0021_MW150_241025	25 Oct 2024	ES2435541	-	<0.1	<0.02	<0.02	0.03	0.19	<0.02	0.05	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW150	0021_QC158_241025	25 Oct 2024	ES2435541	-	<0.1	<0.02	<0.02	0.03	0.16	<0.02	0.04	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW150	0021_QC258_241025	25 Oct 2024	1156160	-	<0.05	<0.01	<0.01	0.10	0.21	<0.01	0.05	<0.01	<0.01	<0.01	<0.05
Mary Creek	Source	0021_MW150	0021_MW150_250129	29 Jan 2025	ES2503552	-	<0.1	<0.02	<0.02	0.04	0.27	<0.02	0.06	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW150	0021_MW150_250404	04 Apr 2025	ES2510113	-	<0.1	<0.02	<0.02	0.05	0.36	<0.02	0.07	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW150	0021_MW150_251023	23 Oct 2025	ES2533521	-	<0.1	<0.02	<0.02	0.05	0.32	<0.02	0.06	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW153	0021_MW153_200812	12 Aug 2020	ES2028499	-	0.140	<0.0016 ^{#2}	<0.0016 ^{#2}	0.244	1.45	0.0038	0.258	<0.0040 ^{#2}	<0.0016 ^{#2}	<0.0016 ^{#2}	<0.004 ^{#2}
Mary Creek	Source	0021_MW153	0021_QC115_200812	12 Aug 2020	ES2028499	-	0.133	<0.0016 ^{#2}	<0.0016 ^{#2}	0.226	1.30	0.0037	0.252	<0.0040 ^{#2}	<0.0016 ^{#2}	<0.0016 ^{#2}	<0.004 ^{#2}
Mary Creek	Source	0021_MW153	0021_QC215_200812	12 Aug 2020	737847	0.037	0.13	0.009	<0.001	0.16	1.4	0.003	0.29	<0.001	<0.001	<0.001	<0.005
Mary Creek	Source	0021_MW153	0021_MW153_241025	25 Oct 2024	ES2435541	-	<0.1	<0.02	<0.02	0.13	0.85	<0.02	0.16	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW153	0021_MW153_250129	29 Jan 2025	ES2503552	-	<0.1	<0.02	<0.02	0.14	0.85	<0.02	0.16	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW153	0021_MW153_250404	04 Apr 2025	ES2510113	-	<0.1	<0.02	<0.02	0.15	0.86	<0.02	0.17	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW153	0021_QC140_250404	04 Apr 2025	ES2510113	-	<0.1	<0.02	<0.02	0.12	0.78	<0.02	0.18	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_MW153	0021_QC240_250404	04 Apr 2025	1210052	-	0.10	<0.01	<0.01	0.15	0.87	<0.01	0.17	<0.01	<0.01	<0.01	<0.05
Mary Creek	Source	0021_MW153	0021_MW153_251023	23 Oct 2025	ES2533521	-	<0.1	<0.02	<0.02	0.16	0.94	<0.02	0.16	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_SW002	AB_SW02	20 Apr 2017	ES1709644	-	<0.002	<0.0005	<0.0005	0.0264	0.832	<0.0005	0.0569	<0.0005	<0.0005	<0.0005	<0.001
Mary Creek	Source	0021_SW002	0021_SW002_211019	19 Oct 2021	ES2138639	-	<0.1	<0.02	<0.02	0.07	0.60	<0.02	0.13	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_SW002	0021_SW002_220405	05 Apr 2022	ES2212442	-	<0.1	<0.02	<0.02	0.02	0.18	<0.02	0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_SW002	0021_SW002_221013	13 Oct 2022	ES2237106	-	<0.1	<0.02	<0.02	0.05	0.36	<0.02	0.07	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_SW002	0021_SW002_230420	20 Apr 2023	ES2313364	-	<0.1	<0.02	<0.02	<0.02	0.18	<0.02	0.07	<0.05	<0.02	<0.02	<0.05
Mary Creek	Source	0021_SW002	0021_SW002_231018	18 Oct 2023	ES2336399	-	<0.1	<0.02	<0.02	0.03	0.38	<0.02	0.06	<0.05	<0.02	<0.02	<0.05



Appendix B
Table B5f
Historical Water Analytical Results - Mary Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTTrDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluoro-n-hexadecanoic acid (PFHxDA)	N-Ethylperfluorooctane sulfonamide (EtFOSA)
	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	0.001	0.002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.05	0.001
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%													
PFAS NEMP 3.0 2025 Recreational water quality													

Catchment	SPR	Location	Field ID	Date	Lab Report No.													
Mary Creek	Source	0021_SW002	0021_SW002_240411	11 Apr 2024	ES2412012	-	<0.1	<0.02	<0.02	<0.02	0.13	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW002	0021_SW002_251022	22 Oct 2025	ES2533521	-	<0.1	<0.02	<0.02	0.03	0.23	<0.02	0.04	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW003	AB_SW03	20 Apr 2017	ES1709644	-	<0.002	<0.0005	<0.0005	<0.0005	0.0054	<0.0005	0.0013	<0.0005	<0.0005	<0.0005	-	<0.001
Mary Creek	Source	0021_SW003	0021_SW003_211019	19 Oct 2021	ES2138639	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW003	0021_SW003_220405	05 Apr 2022	ES2212442	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW003	0021_QC205_221013	13 Oct 2022	308187	-	<0.02	<0.02	<0.05	<0.01	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02	-	<0.1
Mary Creek	Source	0021_SW003	0021_SW003_221013	13 Oct 2022	ES2237106	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW003	0021_SW003_230420	20 Apr 2023	ES2313364	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW003	0021_SW003_240411	11 Apr 2024	ES2412012	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW003	0021_SW003_250403	03 Apr 2025	ES2510622	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW003	0021_SW003_250526	26 May 2025	ES2516045	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW003	0021_SW003_250704	04 Jul 2025	ES2520608	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW003	0021_SW003_250805	05 Aug 2025	ES2524252	-	<0.1	<0.02	<0.02	<0.02	0.05	<0.02	0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW004	AB_SW04	13 Apr 2017	ES1709064	-	<0.002	<0.0005	<0.0005	<0.0005	0.0014	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001
Mary Creek	Source	0021_SW004	TNQA08	13 Apr 2017	ES1709064	-	<0.002	<0.0005	<0.0005	<0.0005	0.0014	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001
Mary Creek	Source	0021_SW004	0021_SW004_211026	26 Oct 2021	ES2138639	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW004	0021_SW004_220406	06 Apr 2022	ES2212442	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW004	0021_SW004_221014	14 Oct 2022	ES2237106	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW004	0021_SW004_230421	21 Apr 2023	ES2313364	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW004	0021_SW004_240412	12 Apr 2024	ES2412012	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW004	0021_SW004_250402	02 Apr 2025	ES2510622	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW011	B_SW02	11 Apr 2017	ES1708884	-	<0.002	<0.0005	<0.0005	0.0017	0.0122	<0.0005	0.0029	<0.0005	<0.0005	<0.0005	-	<0.001
Mary Creek	Source	0021_SW011	0021_SW011_211020	20 Oct 2021	ES2138639	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW011	0021_SW011_220407	07 Apr 2022	ES2212442	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW011	0021_SW011_221012	12 Oct 2022	ES2237106	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW011	0021_SW011_230420	20 Apr 2023	ES2313364	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW011	0021_SW011_240410	10 Apr 2024	ES2412012	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW017	DC_SW02	13 Apr 2017	ES1709064	-	<0.002	0.0006	<0.0005	0.0060	0.0483	<0.0005	0.0051	<0.0005	<0.0005	<0.0005	-	<0.001
Mary Creek	Source	0021_SW017	0021_QC206_220406	06 Apr 2022	293031	-	<0.02	<0.02	<0.05	<0.01	0.1	<0.01	<0.02	<0.5	<0.1	<0.02	-	<0.1
Mary Creek	Source	0021_SW017	0021_SW017_220406	06 Apr 2022	ES2212442	-	<0.1	<0.02	<0.02	<0.02	0.10	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW017	0021_SW017_221014	14 Oct 2022	ES2237106	-	<0.1	<0.02	<0.02	0.02	0.22	<0.02	0.06	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW017	0021_SW017_250526	26 May 2025	ES2516045	-	<0.1	<0.02	<0.02	<0.02	0.06	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW017	0021_SW017_250704	04 Jul 2025	ES2520608	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW017	0021_SW017_250805	05 Aug 2025	ES2524252	-	<0.1	<0.02	<0.02	<0.02	0.20	<0.02	0.04	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW017	0021_SW017_250825	25 Aug 2025	ES2526742	-	<0.1	<0.02	<0.02	<0.02	0.06	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05	<0.05
Mary Creek	Source	0021_SW017	0021_SW017_250912	12 Sep 2025	ES2528885	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW110	0021_QC101_200804	04 Aug 2020	ES2027217	-	0.002	<0.0005	<0.0005	0.0020	0.0178	<0.0005	0.0040	<0.0005	<0.0005	<0.0005	-	<0.001
Mary Creek	Source	0021_SW110	0021_QC201_200804	04 Aug 2020	736971	<0.001	<0.005	<0.001	<0.001	0.001	0.013	<0.001	0.003	<0.001	<0.001	<0.001	-	<0.005
Mary Creek	Source	0021_SW110	0021_SW110_200804	04 Aug 2020	ES2027217	-	<0.002	<0.0016 ^{#2}	<0.0016 ^{#2}	0.0016	0.0176	<0.0016 ^{#2}	0.0054	<0.0040 ^{#2}	<0.0016 ^{#2}	<0.0016 ^{#2}	-	<0.004 ^{#2}
Mary Creek	Source	0021_SW110	0021_QC109_200810	10 Aug 2020	ES2028286	-	<0.002	0.0005	<0.0005	0.0118	0.108	0.0015	0.0235	<0.0005	<0.0005	<0.0005	-	<0.001
Mary Creek	Source	0021_SW110	0021_QC209_200810	10 Aug 2020	737847	<0.001	0.007	<0.001	<0.001	0.014	0.076	0.001	0.021	<0.001	<0.001	<0.001	-	<0.005
Mary Creek	Source	0021_SW110	0021_SW110_200810	10 Aug 2020	ES2028286	-	<0.002	0.0005	<0.0005	0.0122	0.105	0.0013	0.0253	<0.0005	<0.0005	<0.0005	-	<0.001
Mary Creek	Source	0021_SW110	0021_SW110_211019	19 Oct 2021	ES2138639	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW110	0021_QC100_211122	22 Nov 2021	ES2142514	-	<0.1	<0.02	<0.02	<0.02	0.07	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW110	0021_SW110_211122	22 Nov 2021	ES2142514	-	<0.1	<0.02	<0.02	<0.02	0.07	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW110	0021_SW110_220405	05 Apr 2022	ES2212442	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW110	0021_SW110_221013	13 Oct 2022	ES2237106	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW110	0021_QC111_230420	20 Apr 2023	ES2313364	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW110	0021_QC211_230420	20 Apr 2023	321517	-	<0.02	<0.02	<0.05	<0.01	0.03	<0.01	<0.02	<0.5	<0.1	<0.02	-	<0.1
Mary Creek	Source	0021_SW110	0021_SW110_230420	20 Apr 2023	ES2313364	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW110	0021_SW110_231019	19 Oct 2023	ES2336399	-	<0.1	<0.02	<0.02	0.04	0.29	<0.02	0.06	<0.05	<0.02	<0.02	-	<0.05



Appendix B
Table B5f
Historical Water Analytical Results - Mary Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Carboxylic Acids													N-Ethyl perfluorooctane sulfonamide (EtFOSA)
	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTTrDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluoro-n-hexadecanoic acid (PFHxDA)		
	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	0.001	0.002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.05	0.001	
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%														
PFAS NEMP 3.0 2025 Recreational water quality														

Catchment	SPR	Location	Field ID	Date	Lab Report No.													
Mary Creek	Source	0021_SW110	0021_QC110_240410	10 Apr 2024	ES2412012	-	<0.1	<0.02	<0.02	<0.02	0.10	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW110	0021_QC210_240410	10 Apr 2024	348825	-	<0.02	<0.02	<0.05	<0.01	0.10	<0.01	<0.02	<0.5	<0.1	<0.02	-	<0.1
Mary Creek	Source	0021_SW110	0021_SW110_240410	10 Apr 2024	ES2412012	-	<0.1	<0.02	<0.02	<0.02	0.08	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW110	0021_QC108_241024	24 Oct 2024	ES2435541	-	<0.1	<0.02	<0.02	0.03	0.18	<0.02	0.04	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW110	0021_QC208_241024	24 Oct 2024	1156146	-	<0.05	<0.01	<0.01	0.03	0.22	<0.01	0.05	<0.01	<0.01	<0.01	-	<0.05
Mary Creek	Source	0021_SW110	0021_SW110_241024	24 Oct 2024	ES2435541	-	<0.1	<0.02	<0.02	0.03	0.22	<0.02	0.06	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW110	0021_SW110_250403	03 Apr 2025	ES2510623	-	<0.1	<0.02	<0.02	<0.02	0.07	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW127	0021_QC122_200820	20 Aug 2020	EW2003840	-	0.056	0.0019	<0.0005	0.112	0.820	0.0040	0.146	<0.0005	<0.0005	0.0010	-	<0.001
Mary Creek	Source	0021_SW127	0021_SW127_200820	20 Aug 2020	EW2003840	-	0.049	0.0010	<0.0005	0.0955	0.656	0.0038	0.123	<0.0005	<0.0005	<0.0005	-	<0.001
Mary Creek	Source	0021_SW127	0021_QC105_211020	20 Oct 2021	ES2138639	-	<0.1	<0.02	<0.02	<0.02	0.08	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW127	0021_SW127_211020	20 Oct 2021	ES2138639	-	<0.1	<0.02	<0.02	<0.02	0.07	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW127	0021_SW127_211122	22 Nov 2021	ES2142514	-	<0.1	<0.02	<0.02	0.06	0.64	<0.02	0.08	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW127	0021_SW127_220407	07 Apr 2022	ES2212442	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW127	0021_SW127_221012	12 Oct 2022	ES2237106	-	<0.1	<0.02	<0.02	0.04	0.27	<0.02	0.05	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW127	0021_QC261_230202	02 Feb 2023	961609	-	0.05	<0.01	<0.01	0.06 ^{#1}	0.68 ^{#1}	<0.01	0.11 ^{#1}	<0.01	<0.01	<0.01	-	<0.05
Mary Creek	Source	0021_SW127	0021_SW127_230202	02 Feb 2023	ES2303445	-	<0.1	<0.02	<0.02	0.10	0.69	<0.02	0.10	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW127	0021_SW127_230309	09 Mar 2023	ES2308203	-	<0.1	<0.02	<0.02	0.06	0.44	<0.02	0.08	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW127	0021_SW127_230420	20 Apr 2023	ES2313364	-	<0.1	<0.02	<0.02	0.07	0.30	<0.02	0.09	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW127	0021_QC100_230501	01 May 2023	ES2314437	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW127	0021_QC200_230501	01 May 2023	987074	-	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.05
Mary Creek	Source	0021_SW127	0021_SW127_230501	01 May 2023	ES2314437	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW127	0021_SW127_230606	06 Jun 2023	ES2319084	-	<0.1	<0.02	<0.02	0.03	0.24	<0.02	0.04	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW127	0021_SW127_231018	18 Oct 2023	ES2336399	-	<0.1	<0.02	<0.02	0.05	0.37	<0.02	0.08	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW127	0021_SW127_240410	10 Apr 2024	ES2412012	-	<0.1	<0.02	<0.02	0.04	0.32	<0.02	0.04	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW127	0021_SW127_250401	01 Apr 2025	ES2510623	-	<0.1	<0.02	<0.02	<0.02	0.15	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_210831	31 Aug 2021	ES2131665	-	<0.1	<0.02	<0.02	0.08	0.66	<0.02	0.11	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_QC121_211111	11 Nov 2021	EW2104861	-	<0.1	<0.02	<0.02	0.10	1.09	<0.02	0.17	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111112211	11 Nov 2021	EW2104861	-	<0.1	<0.02	<0.02	0.11	1.03	<0.02	0.18	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111112313	11 Nov 2021	EW2104861	-	<0.1	<0.02	<0.02	0.04	0.43	<0.02	0.07	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_QC122_211112	12 Nov 2021	EW2104861	-	<0.1	<0.02	<0.02	0.03	0.32	<0.02	0.06	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_QC221_211112	12 Nov 2021	844059	0.01 ^{#1}	<0.05	<0.01	<0.01	0.02 ^{#1}	0.20 ^{#1}	<0.01	0.03	<0.01	<0.01	<0.01	-	<0.05
Mary Creek	Source	0021_SW153	0021_QC222_211112	12 Nov 2021	844059	0.02 ^{#1}	<0.05	<0.01	<0.01	0.03 ^{#1}	0.28 ^{#1}	<0.01	0.05	<0.01	<0.01	<0.01	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111120014	12 Nov 2021	EW2104861	-	<0.1	<0.02	<0.02	0.05	0.53	<0.02	0.09	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111120115	12 Nov 2021	EW2104861	-	<0.1	<0.02	<0.02	0.04	0.48	<0.02	0.09	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111120216	12 Nov 2021	EW2104861	-	<0.1	<0.02	<0.02	0.04	0.49	<0.02	0.09	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111120317	12 Nov 2021	EW2104861	-	<0.1	<0.02	<0.02	0.04	0.43	<0.02	0.08	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111120418	12 Nov 2021	EW2104861	-	<0.1	<0.02	<0.02	0.03	0.38	<0.02	0.07	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111120520	12 Nov 2021	EW2104861	-	<0.1	<0.02	<0.02	0.04	0.41	<0.02	0.07	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111120621	12 Nov 2021	EW2104861	-	<0.1	<0.02	<0.02	0.04	0.40	<0.02	0.07	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111120722	12 Nov 2021	EW2104861	-	<0.1	<0.02	<0.02	0.03	0.35	<0.02	0.06	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111120823	12 Nov 2021	EW2104861	-	<0.1	<0.02	<0.02	0.03	0.28	<0.02	0.05	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111120924	12 Nov 2021	EW2104861	-	<0.1	<0.02	<0.02	0.03	0.33	<0.02	0.06	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111121025	12 Nov 2021	EW2104861	-	<0.1	<0.02	<0.02	0.03	0.30	<0.02	0.06	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111121127	12 Nov 2021	EW2104861	-	<0.1	<0.02	<0.02	0.03	0.32	<0.02	0.06	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111121228	12 Nov 2021	EW2104861	-	<0.1	<0.02	<0.02	0.03	0.34	<0.02	0.05	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111121329	12 Nov 2021	EW2104861	-	<0.1	<0.02	<0.02	0.03	0.40	<0.02	0.07	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111121430	12 Nov 2021	EW2104861	-	<0.1	<0.02	<0.02	0.03	0.40	<0.02	0.06	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111121531	12 Nov 2021	EW2104861	-	<0.1	<0.02	<0.02	0.04	0.39	<0.02	0.07	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111121632	12 Nov 2021	EW2104861	-	<0.1	<0.02	<0.02	0.04	0.44	<0.02	0.07	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111121734	12 Nov 2021	EW2104861	-	<0.1	<0.02	<0.02	0.03	0.29	<0.02	0.05	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111121835	12 Nov 2021	EW2104861	-	<0.1	<0.02	<0.02	0.04	0.42	<0.02	0.07	<0.05	<0.02	<0.02	-	<0.05



Appendix B
Table B5f
Historical Water Analytical Results - Mary Creek

	PFAS - Perfluoroalkyl Carboxylic Acids													N-Ethyl perfluorooctane sulfonamide (EtFOSA)
	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTriDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluoro-n-hexadecanoic acid (PFHxDA)		
	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	0.001	0.002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.05	0.001	
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%														
PFAS NEMP 3.0 2025 Recreational water quality														

Catchment	SPR	Location	Field ID	Date	Lab Report No.													
Mary Creek	Source	0021_SW153	0021_SW153_2111121936	12 Nov 2021	EW2104861	-	<0.1	<0.02	<0.02	0.04	0.46	<0.02	0.08	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111122037	12 Nov 2021	EW2104861	-	<0.1	<0.02	<0.02	0.04	0.45	<0.02	0.07	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_QC123_211210	10 Dec 2021	ES2146373	-	<0.1	<0.02	<0.02	0.09	0.87	<0.02	0.15	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_QC223_211210	10 Dec 2021	852877	<0.01	<0.05	<0.01	<0.01	0.03 ^{#1}	0.28 ^{#1}	<0.01	0.06	<0.01	<0.01	<0.01	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2112100431	10 Dec 2021	ES2146373	-	<0.1	<0.02	<0.02	0.10	0.93	<0.02	0.16	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2112100833	10 Dec 2021	ES2146373	-	<0.1	<0.02	<0.02	0.05	0.50	<0.02	0.09	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2112101234	10 Dec 2021	ES2146373	-	<0.1	<0.02	<0.02	0.04	0.44	<0.02	0.08	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2112101635	10 Dec 2021	ES2146373	-	<0.1	<0.02	<0.02	<0.02	0.17	<0.02	0.03	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2112102036	10 Dec 2021	ES2146373	-	<0.1	<0.02	<0.02	<0.02	0.16	<0.02	0.03	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_QC124_211211	11 Dec 2021	ES2146373	-	<0.1	<0.02	<0.02	0.04	0.36	<0.02	0.06	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_QC224_211211	11 Dec 2021	852877	<0.01	<0.05	<0.01	<0.01	0.03 ^{#1}	0.24 ^{#1}	<0.01	0.05	<0.01	<0.01	<0.01	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2112110037	11 Dec 2021	ES2146373	-	<0.1	<0.02	<0.02	0.02	0.21	<0.02	0.04	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2112110438	11 Dec 2021	ES2146373	-	<0.1	<0.02	<0.02	0.03	0.26	<0.02	0.05	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2112110840	11 Dec 2021	ES2146373	-	<0.1	<0.02	<0.02	0.04	0.30	<0.02	0.05	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2112111642	11 Dec 2021	ES2146373	-	<0.1	<0.02	<0.02	0.04	0.40	<0.02	0.07	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2112112043	11 Dec 2021	ES2146373	-	<0.1	<0.02	<0.02	0.05	0.44	<0.02	0.08	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2112120445	12 Dec 2021	ES2146373	-	<0.1	<0.02	<0.02	0.06	0.51	<0.02	0.09	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2112120847	12 Dec 2021	ES2146373	-	<0.1	<0.02	<0.02	0.05	0.56	<0.02	0.09	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2112130051	13 Dec 2021	ES2146373	-	<0.1	<0.02	<0.02	0.06	0.58	<0.02	0.10	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2112131255	13 Dec 2021	ES2146373	-	<0.1	<0.02	<0.02	0.09	0.80	<0.02	0.13	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_QC102_202022	22 Feb 2022	ES2206899	-	<0.1	<0.02	<0.02	<0.02	0.15	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_QC103_202022	22 Feb 2022	ES2206899	-	<0.1	<0.02	<0.02	<0.02	0.11	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_QC202_220222	22 Feb 2022	868765	<0.01	<0.05	<0.01	<0.01	0.01 ^{#1}	0.21	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.05
Mary Creek	Source	0021_SW153	0021_QC203_220222	22 Feb 2022	868765	<0.01	<0.05	<0.01	<0.01	0.01 ^{#1}	0.16	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2202220055	22 Feb 2022	ES2206899	-	<0.1	<0.02	<0.02	0.08	0.63	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2202220156	22 Feb 2022	ES2206899	-	<0.1	<0.02	<0.02	0.05	0.34	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2202220257	22 Feb 2022	ES2206899	-	<0.1	<0.02	<0.02	0.03	0.31	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2202220358	22 Feb 2022	ES2206899	-	<0.1	<0.02	<0.02	0.02	0.22	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2202220459	22 Feb 2022	ES2206899	-	<0.1	<0.02	<0.02	<0.02	0.19	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2202220803	22 Feb 2022	ES2206899	-	<0.1	<0.02	<0.02	<0.02	0.14	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2202221005	22 Feb 2022	ES2206899	-	<0.1	<0.02	<0.02	<0.02	0.15	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2202221106	22 Feb 2022	ES2206899	-	<0.1	<0.02	<0.02	0.02	0.22	<0.02	0.03	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2202221410	22 Feb 2022	ES2206899	-	<0.1	<0.02	<0.02	0.03	0.24	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2202221713	22 Feb 2022	ES2206899	-	<0.1	<0.02	<0.02	0.02	0.17	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2202222017	22 Feb 2022	ES2206899	-	<0.1	<0.02	<0.02	<0.02	0.12	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2202230022	23 Feb 2022	ES2206899	-	<0.1	<0.02	<0.02	<0.02	0.09	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_220408	08 Apr 2022	ES2212827	-	<0.1	<0.02	<0.02	<0.02	0.09	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2205120953	12 May 2022	ES2216861	-	<0.1	<0.02	<0.02	<0.02	0.12	<0.02	0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2205121054	12 May 2022	ES2216861	-	<0.1	<0.02	<0.02	0.02	0.13	<0.02	0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2205121155	12 May 2022	ES2216861	-	<0.1	<0.02	<0.02	0.02	0.15	<0.02	0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2205121257	12 May 2022	ES2216861	-	<0.1	<0.02	<0.02	0.02	0.14	<0.02	0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2205121358	12 May 2022	ES2216861	-	<0.1	<0.02	<0.02	0.02	0.14	<0.02	0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2205121459	12 May 2022	ES2216861	-	<0.1	<0.02	<0.02	0.02	0.14	<0.02	0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_221012	12 Oct 2022	ES2237106	-	<0.1	<0.02	<0.02	0.05	0.36	<0.02	0.07	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_QC112_230420	20 Apr 2023	ES2313364	-	<0.1	<0.02	<0.02	0.07	0.49	<0.02	0.10	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_QC212_230420	20 Apr 2023	321517	-	0.05	<0.02	<0.05	0.06	0.54	<0.01	0.1	<0.5	<0.1	<0.02	-	<0.1
Mary Creek	Source	0021_SW153	0021_SW153_230420	20 Apr 2023	ES2313364	-	<0.1	<0.02	<0.02	0.07	0.28	<0.02	0.09	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_QC107_231018	18 Oct 2023	ES2336399	-	<0.1	<0.02	<0.02	0.03	0.28	<0.02	0.04	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_QC207_231018	18 Oct 2023	335876	-	0.05	<0.02	<0.05	0.04	0.38	<0.01	0.08	<0.5	<0.1	<0.02	-	<0.1
Mary Creek	Source	0021_SW153	0021_SW153_231018	18 Oct 2023	ES2336399	-	<0.1	<0.02	<0.02	0.03	0.26	<0.02	0.05	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_240410	10 Apr 2024	ES2412012	-	<0.1	<0.02	<0.02	0.04	0.30	<0.02	0.04	<0.05	<0.02	<0.02	-	<0.05



Appendix B
Table B5f
Historical Water Analytical Results - Mary Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

		PFAS - Perfluoroalkyl Carboxylic Acids												N-Ethyl perfluorooctane sulfonamide (EtFOSA)
		Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTTrDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluoro-n-hexadecanoic acid (PFHxDA)	
		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	0.001	0.002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.05	0.001	
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%														
PFAS NEMP 3.0 2025 Recreational water quality														

Catchment	SPR	Location	Field ID	Date	Lab Report No.													
Mary Creek	Source	0021_SW153	0021_QC102_250331	31 Mar 2025	ES2510113	-	<0.1	<0.02	<0.02	<0.02	0.08	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_QC202_250331	31 Mar 2025	1210052	-	<0.05	<0.01	<0.01	<0.01	0.10	<0.01	0.02	<0.01	<0.01	<0.01	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_250331	31 Mar 2025	ES2510623	-	<0.1	<0.02	<0.02	<0.02	0.08	<0.02	0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_QC100_250526	26 May 2025	ES2516045	-	<0.1	<0.02	<0.02	0.03	0.15	<0.02	0.04	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_QC200_250526	26 May 2025	1227520	-	<0.05	<0.01	<0.01	0.03 ^{#1}	0.15	<0.01	0.03	<0.01	<0.01	<0.01	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_250526	26 May 2025	ES2516045	-	<0.1	<0.02	<0.02	0.03	0.15	<0.02	0.04	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_250702	02 Jul 2025	ES2520608	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_250805	05 Aug 2025	ES2524252	-	<0.1	<0.02	<0.02	0.02	0.16	<0.02	0.04	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_250825	25 Aug 2025	ES2526742	-	<0.1	<0.02	<0.02	0.03	0.20	<0.02	0.04	<0.05	<0.02	<0.02	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_QC100_250912	12 Sep 2025	ES2528885	-	<0.1	<0.02	<0.02	0.03	0.15	<0.02	0.03	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	021_QC200_250912	12 Sep 2025	1269913	-	<0.05	<0.01	<0.01	0.02 ^{#1}	0.13	<0.01	0.02	<0.01	<0.01	<0.01	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_250912	12 Sep 2025	ES2528885	-	<0.1	<0.02	<0.02	0.03	0.14	<0.02	0.03	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_251023	23 Oct 2025	ES2533538	-	<0.1	<0.02	<0.02	0.04	0.45	<0.02	0.05	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_MW021	MW021	01 May 2017	ES1710866	-	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001
Mary Creek	Pathway	0021_MW021	0021_MW021_241025	25 Oct 2024	ES2435541	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_MW021	0021_QC161_241025	25 Oct 2024	ES2435541	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_MW021	0021_QC261_241025	25 Oct 2024	1156146	-	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.05
Mary Creek	Pathway	0021_MW021	0021_MW021_250401	01 Apr 2025	ES2510113	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_MW021	0021_MW021_251021	21 Oct 2025	ES2533521	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_MW021	0021_QC124_251021	21 Oct 2025	ES2533538	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_MW021	0021_QC224_251021	21 Oct 2025	1285374	-	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.05
Mary Creek	Pathway	0021_MW060	0021_MW060_210623	23 Jun 2021	ES2123994	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_MW060	0021_MW060_211122	22 Nov 2021	ES2142514	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_MW060	0021_MW060_241025	25 Oct 2024	ES2435541	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_MW060	0021_MW060_250130	30 Jan 2025	ES2503552	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05	<0.05
Mary Creek	Pathway	0021_MW060	0021_MW060_250401	01 Apr 2025	ES2510113	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_MW060	0021_MW060_251023	23 Oct 2025	ES2533521	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_MW070	0021_MW070_210623	23 Jun 2021	ES2123994	-	<0.1	<0.02	<0.02	0.08	0.50	<0.02	0.10	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_MW070	0021_QC202_211122	22 Nov 2021	845848	<0.01	0.08	<0.01	<0.01	0.07 ^{#1}	0.35	<0.01	0.07	<0.01	<0.01	<0.01	-	<0.05
Mary Creek	Pathway	0021_MW070	0021_MW070_211123	23 Nov 2021	ES2142514	-	<0.1	<0.02	<0.02	0.09	0.77	<0.02	0.08	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_MW070	0021_MW070_241025	25 Oct 2024	ES2435541	-	<0.1	<0.02	<0.02	0.04	0.30	<0.02	0.05	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_MW070	0021_MW070_250130	30 Jan 2025	ES2503552	-	<0.1	<0.02	<0.02	0.06	0.32	<0.02	0.06	<0.05	<0.02	<0.02	<0.05	<0.05
Mary Creek	Pathway	0021_MW070	0021_MW070_250407	07 Apr 2025	ES2510113	-	<0.1	<0.02	<0.02	0.08	0.40	<0.02	0.07	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_MW070	0021_MW070_251023	23 Oct 2025	ES2533521	-	<0.1	<0.02	<0.02	0.05	0.30	<0.02	0.05	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_MW071	0021_MW071_210623	23 Jun 2021	ES2123994	-	<0.1	<0.02	<0.02	0.05	0.39	<0.02	0.08	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_MW071	0021_MW071_211123	23 Nov 2021	ES2142514	-	<0.1	<0.02	<0.02	0.06	0.61	<0.02	0.08	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_MW071	0021_QC102_211123	23 Nov 2021	ES2142514	-	<0.1	<0.02	<0.02	0.07	0.67	<0.02	0.10	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_MW071	0021_MW071_241025	25 Oct 2024	ES2435541	-	<0.1	<0.02	<0.02	<0.02	0.13	<0.02	0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_MW071	0021_MW071_250130	30 Jan 2025	ES2503552	-	<0.1	<0.02	<0.02	0.07	0.49	<0.02	0.10	<0.05	<0.02	<0.02	<0.05	<0.05
Mary Creek	Pathway	0021_MW071	0021_MW071_250407	07 Apr 2025	ES2510113	-	<0.1	<0.02	<0.02	0.06	0.37	<0.02	0.08	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_MW071	0021_MW071_251023	23 Oct 2025	ES2533521	-	<0.1	<0.02	<0.02	0.03	0.22	<0.02	0.04	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_MW072	0021_MW072_210623	23 Jun 2021	ES2123994	-	<0.1	<0.02	<0.02	0.14	0.81	<0.02	0.14	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_MW072	0021_MW072_211123	23 Nov 2021	ES2142514	-	<0.1	<0.02	<0.02	0.14	1.13	<0.02	0.12	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_MW072	0021_MW072_241025	25 Oct 2024	ES2435541	-	<0.1	<0.02	<0.02	0.12	0.67	<0.02	0.10	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_MW072	0021_MW072_250130	30 Jan 2025	ES2503552	-	<0.1	<0.02	<0.02	0.13	0.83	<0.02	0.12	<0.05	<0.02	<0.02	<0.05	<0.05
Mary Creek	Pathway	0021_MW072	0021_MW072_250407	07 Apr 2025	ES2510113	-	<0.1	<0.02	<0.02	0.11	0.56	<0.02	0.09	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_MW072	0021_MW072_251023	23 Oct 2025	ES2533521	-	<0.1	<0.02	<0.02	0.12	0.62	<0.02	0.09	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_MW112	B_MW03	28 Apr 2017	ES1710200	-	<0.002	<0.0005	<0.0005	<0.0005	0.0027	<0.0005	0.0013	<0.0005	<0.0005	<0.0005	-	<0.001
Mary Creek	Pathway	0021_MW112	0021_MW112_210624	24 Jun 2021	ES2123994	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_MW112	0021_MW112_211020	20 Oct 2021	ES2138639	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_MW112	0021_MW112_211123	23 Nov 2021	ES2142514	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05



Appendix B
Table B5f
Historical Water Analytical Results - Mary Creek

EQL	PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	PFAS NEMP 3.0 2025 Recreational water quality	PFAS - Perfluoroalkyl Carboxylic Acids												N-Ethyl perfluorooctane sulfonamide (EtFOSA)
			Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluoro-n-hexadecanoic acid (PFHxDA)	
			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
			0.001	0.002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.001

Catchment	SPR	Location	Field ID	Date	Lab Report No.												
Mary Creek	Pathway	0021_MW112	0021_MW112_220407	07 Apr 2022	ES2212442	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW112	0021_QC210_220407	07 Apr 2022	293031	-	<0.02	<0.02	<0.05	<0.01	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02	<0.1
Mary Creek	Pathway	0021_MW112	0021_MW112_221012	12 Oct 2022	ES2237106	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW112	0021_MW112_230418	18 Apr 2023	ES2313364	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW112	0021_MW112_231016	16 Oct 2023	ES2336398	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW112	0021_MW112_240408	08 Apr 2024	ES2411994	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW112	0021_MW112_241024	24 Oct 2024	ES2435541	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW112	0021_MW112_250130	30 Jan 2025	ES2503552	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW112	0021_MW112_250401	01 Apr 2025	ES2510113	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW112	0021_QC154_250401	01 Apr 2025	ES2510113	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW112	0021_MW112_251023	23 Oct 2025	ES2533521	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW113	B_MW04	28 Apr 2017	ES1710200	-	<0.002	<0.0005	<0.0005	<0.0005	0.0055	<0.0005	0.0033	<0.0005	<0.0005	<0.0005	<0.001
Mary Creek	Pathway	0021_MW113	B_MW04_180502	02 May 2018	ES1812871	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW113	0021_MW113_210623	23 Jun 2021	ES2123994	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW113	0021_MW113_211020	20 Oct 2021	ES2138639	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW113	0021_MW113_211123	23 Nov 2021	ES2142514	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW113	0021_MW113_220407	07 Apr 2022	ES2212442	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW113	0021_MW113_221013	13 Oct 2022	ES2237106	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW113	0021_MW113_230419	19 Apr 2023	ES2313364	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW113	0021_MW113_231018	18 Oct 2023	ES2336398	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW113	0021_MW113_240410	10 Apr 2024	ES2411994	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW113	0021_MW113_241024	24 Oct 2024	ES2435541	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW113	0021_QC109_241024	24 Oct 2024	ES2435541	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW113	0021_QC209_241024	24 Oct 2024	1156160	-	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05
Mary Creek	Pathway	0021_MW113	0021_MW113_250130	30 Jan 2025	ES2503552	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW113	0021_MW113_250130	30 Jan 2025	ES2503552	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW113	0021_MW113_250407	07 Apr 2025	ES2510113	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW133	MC_MW04_180411	11 Apr 2018	ES1810721	-	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
Mary Creek	Pathway	0021_MW133	MC_MW04_180502	02 May 2018	ES1812871	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW133	0021_MW133_221012	11 Oct 2022	ES2237106	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW133	0021_MW133_230418	18 Apr 2023	ES2313364	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW133	0021_MW133_231017	17 Oct 2023	ES2336398	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW133	0021_MW133_240409	09 Apr 2024	ES2411994	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW133	0021_MW133_241023	23 Oct 2024	ES2435078	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW133	0021_MW133_250402	02 Apr 2025	ES2510113	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW133	0021_MW133_251021	21 Oct 2025	ES2533521	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW133	0021_QC103_251021	21 Oct 2025	ES2533538	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_MW133	0021_QC203_251021	21 Oct 2025	1285374	-	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05
Mary Creek	Pathway	0021_SW010	B_SW01	12 Apr 2017	ES1709064	-	<0.002	0.0014	<0.0005	0.0211	0.110	0.0013	0.0128	<0.0005	<0.0005	<0.0005	<0.001
Mary Creek	Pathway	0021_SW010	B_SW01_180501	01 May 2018	ES1812871	-	<0.002	<0.0005	<0.0005	0.0681	0.314	0.0014	0.0305	<0.0005	<0.0005	<0.0005	<0.001
Mary Creek	Pathway	0021_SW010	0021_SW010_211020	20 Oct 2021	ES2138639	-	<0.1	<0.02	<0.02	0.04	0.30	<0.02	0.03	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_SW010	0021_SW010_211122	22 Nov 2021	ES2142514	-	<0.1	<0.02	<0.02	<0.02	0.08	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_SW010	0021_SW010_220407	07 Apr 2022	ES2212442	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_SW010	0021_SW010_220512	12 May 2022	ES2216861	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_SW010	0021_SW010_221012	12 Oct 2022	ES2237106	-	<0.1	<0.02	<0.02	0.04	0.26	<0.02	0.05	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_SW010	0021_SW010_230202	02 Feb 2023	ES2303445	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_SW010	0021_SW010_230309	09 Mar 2023	ES2308203	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_SW010	0021_SW010_230419	19 Apr 2023	ES2313364	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_SW010	0021_SW010_230501	01 May 2023	ES2314437	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_SW010	0021_QC100_230606	06 Jun 2023	ES2319084	-	<0.1	<0.02	<0.02	<0.02	0.06	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_SW010	0021_SW010_230606	06 Jun 2023	ES2319084	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05



Appendix B
Table B5f
Historical Water Analytical Results - Mary Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

EQL	PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	PFAS NEMP 3.0 2025 Recreational water quality	PFAS - Perfluoroalkyl Carboxylic Acids												N-Ethyl perfluorooctane sulfonamide (EtFOSA)
			Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTriDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluoro-n-hexadecanoic acid (PFHxDA)	
			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
			0.001	0.002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.05	0.001

Catchment	SPR	Location	Field ID	Date	Lab Report No.													
Mary Creek	Pathway	0021_SW010	0021_SW010_230808	08 Aug 2023	ES2326813	-	<0.1	<0.02	<0.02	<0.02	0.07	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_SW010	0021_SW010_231212	12 Dec 2023	ES2343587	-	<0.1	<0.02	<0.02	0.07	0.34	<0.02	0.08	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_SW010	0021_SW010_240410	10 Apr 2024	ES2412012	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_SW010	0021_SW010_250130	30 Jan 2025	ES2503552	-	<0.1	<0.02	<0.02	0.02	0.05	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05	<0.05
Mary Creek	Pathway	0021_SW010	0021_SW010_250404	04 Apr 2025	ES2510622	-	<0.1	<0.02	<0.02	0.02	0.19	<0.02	0.04	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_SW010	0021_QC102_250805	05 Aug 2025	ES2524252	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_SW010	0021_QC202_250825	05 Aug 2025	1254110	-	<0.05	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.05
Mary Creek	Pathway	0021_SW010	0021_SW010_250805	05 Aug 2025	ES2524252	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_SW010	0021_SW010_250825	25 Aug 2025	ES2526742	-	<0.1	<0.02	<0.02	0.03	0.20	<0.02	0.03	<0.05	<0.02	<0.02	<0.05	<0.05
Mary Creek	Pathway	0021_SW010	0021_SW010_250912	12 Sep 2025	ES2528885	-	<0.1	<0.02	<0.02	0.03	0.20	<0.02	0.03	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_SW044	MC_SW02_180323	23 Mar 2018	ES1809241	-	<0.002	<0.0005	<0.0005	0.0042	0.0293	<0.0005	0.0012	<0.0005	<0.0005	<0.0005	-	<0.001
Mary Creek	Pathway	0021_SW044	MC_SW02_180430	30 Apr 2018	ES1812871	-	<0.002	<0.0020 ^{#2}	<0.0020 ^{#2}	0.0306	0.120	<0.0020 ^{#2}	0.0082	<0.0050 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}	-	<0.005 ^{#2}
Mary Creek	Pathway	0021_SW044	0021_SW044_220512	12 May 2022	ES2216861	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_SW044	0021_SW044_221011	11 Oct 2022	ES2237106	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_SW044	0021_SW044_230418	18 Apr 2023	ES2313364	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_SW044	0021_SW044_231017	17 Oct 2023	ES2336399	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_SW044	0021_QC203_240409	09 Apr 2024	348825	-	<0.02	<0.02	<0.05	0.01	0.04	<0.01	<0.02	<0.5	<0.1	<0.02	-	<0.1
Mary Creek	Pathway	0021_SW044	0021_SW044_240409	09 Apr 2024	ES2412012	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_SW044	0021_SW044_241028	28 Oct 2024	ES2435541	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_SW044	0021_SW044_250401	01 Apr 2025	ES2510622	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_SW044	0021_SW044_251021	21 Oct 2025	ES2533538	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_SW045	MC_SW03_180323	23 Mar 2018	ES1809241	-	<0.002	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001
Mary Creek	Pathway	0021_SW045	MC_SW03_180430	30 Apr 2018	ES1812871	-	<0.002	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}	<0.0050 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}	-	<0.005 ^{#2}
Mary Creek	Pathway	0021_SW045	0021_SW045_220512	12 May 2022	ES2216861	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_SW045	0021_SW045_221011	11 Oct 2022	ES2237106	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_SW045	0021_SW045_230418	18 Apr 2023	ES2313364	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_SW045	0021_QC102_231017	17 Oct 2023	ES2336399	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_SW045	0021_QC202_231017	17 Oct 2023	335876	-	<0.02	<0.02	<0.05	<0.01	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02	-	<0.1
Mary Creek	Pathway	0021_SW045	0021_SW045_231017	17 Oct 2023	ES2336399	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_SW045	0021_SW045_240409	09 Apr 2024	ES2412012	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_SW045	0021_SW045_241023	23 Oct 2024	ES2435078	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_SW045	0021_SW045_250401	01 Apr 2025	ES2510622	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_SW045	0021_SW045_251021	21 Oct 2025	ES2533538	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_SW048	MC_SW06_180406	06 Apr 2018	ES1810551	-	<0.002	<0.0005	<0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001
Mary Creek	Pathway	0021_SW048	0021_SW048_221012	12 Oct 2022	ES2237106	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_SW048	0021_SW048_230419	19 Apr 2023	ES2313364	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_SW048	0021_SW048_231017	18 Oct 2023	ES2336399	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_SW048	0021_SW048_240410	10 Apr 2024	ES2412012	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_SW048	0021_SW048_241025	25 Oct 2024	ES2435541	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_SW048	0021_SW048_250403	03 Apr 2025	ES2510622	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_SW048	0021_SW048_251021	21 Oct 2025	ES2533538	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_SW053	MC_SW11_180430	30 Apr 2018	ES1812871	-	<0.002	<0.0020 ^{#2}	<0.0020 ^{#2}	0.0448	0.176	<0.0020 ^{#2}	0.0112	<0.0050 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}	-	<0.005 ^{#2}
Mary Creek	Pathway	0021_SW053	0021_SW053_220512	12 May 2022	ES2216861	-	<0.1	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_SW053	0021_SW053_221011	11 Oct 2022	ES2237106	-	<0.1	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_SW053	0021_SW053_230202	02 Feb 2023	ES2303445	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_SW053	0021_QC200_230309	09 Mar 2023	972744	-	<0.05	<0.01	<0.01	0.01 ^{#1}	0.07 ^{#1}	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.05
Mary Creek	Pathway	0021_SW053	0021_SW053_230309	09 Mar 2023	ES2308203	-	<0.1	<0.02	<0.02	<0.02	0.06	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_SW053	0021_QC101_230418	18 Apr 2023	ES2313364	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_SW053	0021_QC201_230418	18 Apr 2023	321517	-	<0.02	<0.02	<0.05	<0.01	0.05	<0.01	<0.02	<0.5	<0.1	<0.02	-	<0.1
Mary Creek	Pathway	0021_SW053	0021_SW053_230418	18 Apr 2023	ES2313364	-	<0.1	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05
Mary Creek	Pathway	0021_SW053	0021_SW053_230501	01 May 2023	ES2314437	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-	<0.05



Appendix B
Table B5f
Historical Water Analytical Results - Mary Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Carboxylic Acids													
	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTTrDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluoro-n-hexadecanoic acid (PFHxDA)	N-Ethylperfluorooctane sulfonamide (EtFOSA)	
	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	0.001	0.002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.05	0.001	
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%														
PFAS NEMP 3.0 2025 Recreational water quality														

Catchment	SPR	Location	Field ID	Date	Lab Report No.												
Mary Creek	Pathway	0021_SW053	0021_QC200_230606	06 Jun 2023	998496	-	<0.05	<0.01	<0.01	<0.01	0.05	<0.01	0.01 ^{#1}	<0.01	<0.01	<0.01	-
Mary Creek	Pathway	0021_SW053	0021_SW053_230606	06 Jun 2023	ES2319084	-	<0.1	<0.02	<0.02	<0.02	0.06	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Pathway	0021_SW053	0021_QC200_230808	08 Aug 2023	1016825	-	<0.05	<0.01	<0.01	0.01	0.03	<0.01	<0.01	<0.01	<0.01	<0.01	-
Mary Creek	Pathway	0021_SW053	0021_SW053_230808	08 Aug 2023	ES2326813	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Pathway	0021_SW053	0021_SW053_231017	17 Oct 2023	ES2336399	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Pathway	0021_SW053	0021_QC100_231212	12 Dec 2023	ES2343587	-	<0.1	<0.02	<0.02	<0.02	0.08	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Pathway	0021_SW053	0021_SW053_231212	12 Dec 2023	ES2343587	-	<0.1	<0.02	<0.02	<0.02	0.07	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Pathway	0021_SW053	0021_QC103_240409	09 Apr 2024	ES2412012	-	<0.1	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Pathway	0021_SW053	0021_SW053_240409	09 Apr 2024	ES2412012	-	<0.1	<0.02	<0.02	<0.02	0.05	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Pathway	0021_SW053	0021_SW053_241023	23 Oct 2024	ES2435078	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Pathway	0021_SW053	0021_QC100_250129	29 Jan 2025	ES2503552	-	<0.1	<0.02	<0.02	<0.02	0.06	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_SW053	0021_QC200_250129	29 Jan 2025	1187025	-	<0.05	<0.01	<0.01	0.02	0.09	<0.01	0.02	<0.01	<0.01	<0.01	-
Mary Creek	Pathway	0021_SW053	0021_SW053_250129	29 Jan 2025	ES2503552	-	<0.1	<0.02	<0.02	<0.02	0.06	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_SW053	0021_SW053_250401	01 Apr 2025	ES2510622	-	<0.1	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Pathway	0021_SW053	0021_SW053_250805	05 Aug 2025	ES2524252	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Pathway	0021_SW053	0021_SW053_250825	25 Aug 2025	ES2526742	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Pathway	0021_SW053	0021_SW053_250912	12 Sep 2025	ES2528885	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Pathway	0021_SW053	0021_SW053_251021	21 Oct 2025	ES2533538	-	<0.1	<0.02	<0.02	<0.02	0.05	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Receptor	0021_SW043	MC_SW01_180320	20 Mar 2018	ES1808818	-	<0.002	<0.0005	<0.0005	0.0075	0.0376	<0.0005	0.0039	<0.0005	<0.0005	<0.0005	-
Mary Creek	Receptor	0021_SW043	MC_SW01_180501	01 May 2018	ES1812871	-	<0.002	<0.0020 ^{#2}	<0.0020 ^{#2}	0.0304	0.116	<0.0020 ^{#2}	0.0082	<0.0050 ^{#2}	<0.0020 ^{#2}	<0.0020 ^{#2}	-
Mary Creek	Receptor	0021_SW043	0021_SW043_220512	12 May 2022	ES2216861	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Receptor	0021_SW043	0021_SW043_221012	12 Oct 2022	ES2237106	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Receptor	0021_SW043	0021_SW043_230418	18 Apr 2023	ES2313364	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Receptor	0021_SW043	0021_SW043_231017	17 Oct 2023	ES2336399	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Receptor	0021_SW043	0021_SW043_240409	09 Apr 2024	ES2412012	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Receptor	0021_SW043	0021_QC106_241023	23 Oct 2024	ES2435078	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Receptor	0021_SW043	0021_QC206_241023	23 Oct 2024	1154751	-	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-
Mary Creek	Receptor	0021_SW043	0021_SW043_241023	23 Oct 2024	ES2435078	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Receptor	0021_SW043	0021_SW043_250129	29 Jan 2025	ES2503552	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Receptor	0021_SW043	0021_SW043_250401	01 Apr 2025	ES2510622	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Receptor	0021_SW043	0021_QC102_251021	21 Oct 2025	ES2533538	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Receptor	0021_SW043	0021_QC202_251021	21 Oct 2025	1285374	-	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-
Mary Creek	Receptor	0021_SW043	0021_SW043_251021	21 Oct 2025	ES2533538	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Receptor	0021_SW052	MC_SW10_180320	20 Mar 2018	ES1808818	-	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-
Mary Creek	Receptor	0021_SW052	MC_SW10_180328	28 Mar 2018	ES1809328	-	<0.002	<0.0005	<0.0005	0.0045	0.0320	<0.0005	0.0027	<0.0005	<0.0005	<0.0005	-
Mary Creek	Receptor	0021_SW052	0021_SW052_220512	12 May 2022	ES2216861	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Receptor	0021_SW052	0021_SW052_221012	12 Oct 2022	ES2237106	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Receptor	0021_SW052	0021_SW052_230418	18 Apr 2023	ES2313364	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Receptor	0021_SW052	0021_SW052_231017	17 Oct 2023	ES2336399	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Receptor	0021_SW052	0021_SW052_240409	09 Apr 2024	ES2412012	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Receptor	0021_SW052	0021_SW052_241023	23 Oct 2024	ES2435078	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Receptor	0021_SW052	0021_SW052_250129	29 Jan 2025	ES2503552	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Mary Creek	Receptor	0021_SW052	0021_SW052_250401	01 Apr 2025	ES2510622	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Receptor	0021_SW052	0021_SW052_251021	21 Oct 2025	ES2533538	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Receptor	0021_SW211	0021_SW211_241023	23 Oct 2024	ES2435078	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Receptor	0021_SW211	0021_SW211_250403	03 Apr 2025	ES2510623	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Mary Creek	Receptor	0021_SW211	0021_SW211_251021	21 Oct 2025	ES2533538	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-

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 Reported Analyte LOR is higher than Requested Analyte LOR



Appendix B
Table B5f
Historical Water Analytical Results - Mary Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Sulfonamide						PFAS - Fluorotelomer Sulfonic Acids			
	N-Ethyl perfluorooctane sulfonamidacetic acid (EiFOSAA)	N-Ethyl perfluorooctane sulfonamidoethanol (EiFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidacetic 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
EQL	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%										
PFAS NEMP 3.0 2025 Recreational water quality										

Catchment	SPR	Location	Field ID	Date	Lab Report No.										
Mary Creek	Source	0021_MW061	0021_MW061_210621	21 Jun 2021	ES2123994	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW061	0021_QC211_210623	23 Jun 2021	807414	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Mary Creek	Source	0021_MW061	0021_MW061_240411	11 Apr 2024	ES2411994	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW061	0021_MW061_241024	24 Oct 2024	ES2435541	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW061	0021_MW061_250424	24 Apr 2025	ES2512435	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW061	0021_MW061_251023	23 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW063	0021_MW063_210622	22 Jun 2021	ES2123994	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW063	0021_MW063_211122	22 Nov 2021	ES2142514	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW063	0021_QC201_211122	22 Nov 2021	845848	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Mary Creek	Source	0021_MW063	0021_MW063_241025	25 Oct 2024	ES2435541	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW063	0021_QC159_241025	25 Oct 2024	ES2435541	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW063	0021_QC259_241025	25 Oct 2024	1156160	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Mary Creek	Source	0021_MW063	0021_MW063_250129	29 Jan 2025	ES2503552	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW063	0021_MW063_250403	03 Apr 2025	ES2510113	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW063	0021_MW063_251022	22 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW064	0021_MW064_210622	22 Jun 2021	ES2123994	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW064	0021_QC212_210623	23 Jun 2021	807414	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Mary Creek	Source	0021_MW064	0021_MW064_211122	22 Nov 2021	ES2142514	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW064	0021_QC101_211122	22 Nov 2021	ES2142514	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW064	0021_MW064_241025	25 Oct 2024	ES2435541	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW064	0021_MW064_250403	03 Apr 2025	ES2510113	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW064	0021_MW064_251022	22 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW064	0021_QC165_251022	22 Oct 2025	ES2533538	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW064	0021_QC265_251022	22 Oct 2025	1285374	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Mary Creek	Source	0021_MW065	0021_MW065_210622	22 Jun 2021	ES2123994	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW065	0021_MW065_211122	22 Nov 2021	ES2142514	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW065	0021_MW065_241024	24 Oct 2024	ES2435541	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW065	0021_MW065_250129	29 Jan 2025	ES2503552	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW065	0021_MW065_250403	03 Apr 2025	ES2510113	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW065	0021_MW065_251022	22 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW101	A_MW01	28 Apr 2017	ES1710200	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Mary Creek	Source	0021_MW101	0021_MW101_200909	09 Sep 2020	ES2031960	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Mary Creek	Source	0021_MW101	0021_MW101_211019	19 Oct 2021	ES2138639	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW101	0021_MW101_220405	05 Apr 2022	ES2212442	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW101	0021_MW101_221013	13 Oct 2022	ES2237106	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW101	0021_MW101_230420	20 Apr 2023	ES2313364	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW101	0021_MW101_231019	19 Oct 2023	ES2336398	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW101	0021_MW101_240410	10 Apr 2024	ES2411994	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW101	0021_MW101_241024	24 Oct 2024	ES2435541	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW101	0021_MW101_250404	04 Apr 2025	ES2510113	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW101	0021_MW101_251023	23 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW103	A_MW03	28 Apr 2017	ES1710200	<0.0200	<0.050	<0.050	<0.0200	<0.050	<0.0200	<0.020	<0.020	<0.020	<0.020
Mary Creek	Source	0021_MW103	A_MW03_180502	02 May 2018	ES1812871	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW103	JBRF-A-MW03-2-200624	24 Jun 2020	727660	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Mary Creek	Source	0021_MW103	0021_MW103_210622	22 Jun 2021	ES2123994	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW103	0021_QC114_210622	22 Jun 2021	ES2123994	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW103	0021_MW103_211019	19 Oct 2021	ES2138639	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW103	0021_MW103_211122	22 Nov 2021	ES2142514	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW103	0021_MW103_220406	06 Apr 2022	ES2212442	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW103	0021_MW103_221013	13 Oct 2022	ES2237106	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW103	0021_MW103_230420	20 Apr 2023	ES2313364	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05



Appendix B
Table B5f
Historical Water Analytical Results - Mary Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Sulfonamide						PFAS - Fluorotelomer Sulfonic Acids			
	N-Ethyl perfluorooctane sulfonamidacetic acid (EiFOSAA)	N-Ethyl perfluorooctane sulfonamidoethanol (EiFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidacetic 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
EQL	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%										
PFAS NEMP 3.0 2025 Recreational water quality										

Catchment	SPR	Location	Field ID	Date	Lab Report No.										
Mary Creek	Source	0021_MW103	0021_MW103_231018	18 Oct 2023	ES2336398	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW103	0021_MW103_240411	11 Apr 2024	ES2411994	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW103	0021_MW103_241025	25 Oct 2024	ES2435541	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW103	0021_MW103_250403	03 Apr 2025	ES2510113	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW103	0021_MW103_251022	22 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW105	A_MW05	28 Apr 2017	ES1710200	<0.0200	<0.050	<0.050	<0.0200	<0.050	<0.0200	<0.020	<0.020	<0.020	<0.020
Mary Creek	Source	0021_MW105	0021_MW105_211019	19 Oct 2021	ES2138639	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW105	0021_QC200_211019	19 Oct 2021	281322	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Mary Creek	Source	0021_MW105	0021_MW105_220406	06 Apr 2022	ES2212442	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW105	0021_MW105_221013	13 Oct 2022	ES2237106	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW105	0021_MW105_230420	20 Apr 2023	ES2313364	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW105	0021_MW105_231019	19 Oct 2023	ES2336398	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW105	0021_MW105_240411	11 Apr 2024	ES2411994	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW105	0021_MW105_241022	22 Oct 2024	ES2435078	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW105	0021_MW105_250129	29 Jan 2025	ES2503552	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW105	0021_MW105_250403	03 Apr 2025	ES2510113	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW105	0021_QC256_250403	03 Apr 2025	1210052	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Mary Creek	Source	0021_MW105	0021_MW105_251023	23 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW106	A_MW06	27 Apr 2017	ES1710200	<0.0200	<0.050	<0.050	<0.0200	<0.050	<0.0200	<0.020	<0.020	<0.020	<0.020
Mary Creek	Source	0021_MW106	JBRF-A-MW06-2-200624	24 Jun 2020	727660	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	0.06	<0.01	<0.01
Mary Creek	Source	0021_MW106	0021_MW106_200909	09 Sep 2020	ES2031960	<0.0016 ^{#2}	<0.004 ^{#2}	<0.004 ^{#2}	<0.0016 ^{#2}	<0.004 ^{#2}	0.0040	<0.002 ^{#2}	0.021	<0.002 ^{#2}	<0.002 ^{#2}
Mary Creek	Source	0021_MW106	0021_QC123_200909	09 Sep 2020	ES2031960	<0.0016 ^{#2}	<0.004 ^{#2}	<0.004 ^{#2}	<0.0016 ^{#2}	<0.004 ^{#2}	0.0054	<0.002 ^{#2}	0.025	<0.002 ^{#2}	<0.002 ^{#2}
Mary Creek	Source	0021_MW106	0021_MW106_211019	19 Oct 2021	ES2138639	<0.02	<0.05	<0.05	<0.02	<0.05	0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW106	0021_MW106_220405	05 Apr 2022	ES2212442	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW106	0021_QC104_220405	05 Apr 2022	ES2212442	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW106	0021_MW106_221013	13 Oct 2022	ES2237106	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW106	0021_QC210_221013	13 Oct 2022	308187	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	0.03	<0.02	<0.02
Mary Creek	Source	0021_MW106	0021_MW106_230420	20 Apr 2023	ES2313364	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	0.08	<0.05	<0.05
Mary Creek	Source	0021_MW106	0021_MW106_231019	19 Oct 2023	ES2336398	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	0.06	<0.05	<0.05
Mary Creek	Source	0021_MW106	0021_MW106_240410	10 Apr 2024	ES2411994	<0.02	<0.05	<0.05	<0.02	<0.05	0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW106	0021_MW106_241024	24 Oct 2024	ES2435541	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW106	0021_MW106_250129	29 Jan 2025	ES2503552	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW106	0021_MW106_250404	04 Apr 2025	ES2510113	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW106	0021_MW106_251022	22 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW107	A_MW07	08 May 2017	ES1711220	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.0008	<0.001	<0.001	<0.001	<0.001
Mary Creek	Source	0021_MW107	0021_MW107_210622	22 Jun 2021	ES2123994	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW107	0021_MW107_211019	19 Oct 2021	ES2138639	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW107	0021_QC100_211019	19 Oct 2021	ES2138639	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW107	0021_MW107_211122	22 Nov 2021	ES2142514	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW107	0021_MW107_220406	06 Apr 2022	ES2212442	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW107	0021_MW107_221013	13 Oct 2022	ES2237106	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW107	0021_MW107_230420	20 Apr 2023	ES2313364	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW107	0021_QC110_230420	20 Apr 2023	ES2313364	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW107	0021_QC210_230420	20 Apr 2023	321517	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Mary Creek	Source	0021_MW107	0021_MW107_231018	18 Oct 2023	ES2336398	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW107	0021_MW107_240411	11 Apr 2024	ES2411994	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW107	0021_QC112_240411	11 Apr 2024	ES2411994	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW107	0021_QC212_240411	11 Apr 2024	348825	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Mary Creek	Source	0021_MW107	0021_MW107_241024	24 Oct 2024	ES2435541	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW107	0021_MW107_250403	03 Apr 2025	ES2510113	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW107	0021_QC156_250403	03 Apr 2025	ES2510113	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05



Appendix B
Table B5f
Historical Water Analytical Results - Mary Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JB RF) (0021)
12626622

	PFAS - Perfluoroalkyl Sulfonamide						PFAS - Fluorotelomer Sulfonic Acids			
	N-Ethyl perfluorooctane sulfonamidacetic acid (EiFOSAA)	N-Ethyl perfluorooctane sulfonamidoethanol (EiFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidacetic 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
EQL	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%										
PFAS NEMP 3.0 2025 Recreational water quality										

Catchment	SPR	Location	Field ID	Date	Lab Report No.										
Mary Creek	Source	0021_MW107	0021_MW107_251023	23 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW110	B_MW01	28 Apr 2017	ES1710200	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Mary Creek	Source	0021_MW110	0021_MW110_210622	22 Jun 2021	ES2123994	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW110	0021_MW110_211020	20 Oct 2021	ES2138639	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW110	0021_MW110_211122	22 Nov 2021	ES2142514	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW110	0021_MW110_220407	07 Apr 2022	ES2212442	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW110	0021_MW110_221013	13 Oct 2022	ES2237106	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW110	0021_MW110_230420	20 Apr 2023	ES2313364	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW110	0021_MW110_231018	18 Oct 2023	ES2336398	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW110	0021_MW110_240410	10 Apr 2024	ES2411994	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW110	0021_MW110_241025	25 Oct 2024	ES2435541	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW110	0021_MW110_250130	29 Jan 2025	ES2503552	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW110	0021_QC103_250130	30 Jan 2025	ES2503552	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW110	0021_QC203_250130	30 Jan 2025	1187025	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.5	<0.1	<0.1
Mary Creek	Source	0021_MW110	0021_MW110_250401	01 Apr 2025	ES2510113	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW110	0021_MW110_251023	23 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW111	B_MW02	28 Apr 2017	ES1710200	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Mary Creek	Source	0021_MW111	0021_MW111_210622	22 Jun 2021	ES2123994	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW111	0021_MW111_211020	20 Oct 2021	ES2138639	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW111	0021_MW111_211122	22 Nov 2021	ES2142514	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW111	0021_MW111_220407	07 Apr 2022	ES2212442	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW111	0021_MW111_221013	13 Oct 2022	ES2237106	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW111	0021_MW111_230420	20 Apr 2023	ES2313364	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW111	0021_MW111_231018	18 Oct 2023	ES2336398	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW111	0021_MW111_240410	10 Apr 2024	ES2411994	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW111	0021_MW111_241025	25 Oct 2024	ES2435541	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW111	0021_MW111_250130	30 Jan 2025	ES2503552	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW111	0021_MW111_250408	08 Apr 2025	ES2510113	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW111	0021_MW111_251023	23 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW150	0021_MW150_200813	13 Aug 2020	ES2028499	<0.0016 ^{#2}	<0.004 ^{#2}	<0.004 ^{#2}	<0.0016 ^{#2}	<0.004 ^{#2}	<0.0016 ^{#2}	<0.002 ^{#2}	<0.002 ^{#2}	<0.002 ^{#2}	<0.002 ^{#2}
Mary Creek	Source	0021_MW150	0021_MW150_241025	25 Oct 2024	ES2435541	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW150	0021_QC158_241025	25 Oct 2024	ES2435541	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW150	0021_QC258_241025	25 Oct 2024	1156160	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Mary Creek	Source	0021_MW150	0021_MW150_250129	29 Jan 2025	ES2503552	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW150	0021_MW150_250404	04 Apr 2025	ES2510113	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW150	0021_MW150_251023	23 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW153	0021_MW153_200812	12 Aug 2020	ES2028499	<0.0016 ^{#2}	<0.004 ^{#2}	<0.004 ^{#2}	<0.0016 ^{#2}	<0.004 ^{#2}	<0.0016 ^{#2}	<0.002 ^{#2}	0.005	<0.002 ^{#2}	<0.002 ^{#2}
Mary Creek	Source	0021_MW153	0021_QC115_200812	12 Aug 2020	ES2028499	<0.0016 ^{#2}	<0.004 ^{#2}	<0.004 ^{#2}	<0.0016 ^{#2}	<0.004 ^{#2}	<0.0016 ^{#2}	<0.002 ^{#2}	0.005	<0.002 ^{#2}	<0.002 ^{#2}
Mary Creek	Source	0021_MW153	0021_QC215_200812	12 Aug 2020	737847	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	0.001	<0.001
Mary Creek	Source	0021_MW153	0021_MW153_241025	25 Oct 2024	ES2435541	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW153	0021_MW153_250129	29 Jan 2025	ES2503552	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW153	0021_MW153_250404	04 Apr 2025	ES2510113	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW153	0021_QC140_250404	04 Apr 2025	ES2510113	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_MW153	0021_QC240_250404	04 Apr 2025	1210052	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Mary Creek	Source	0021_MW153	0021_MW153_251023	23 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW002	AB_SW02	20 Apr 2017	ES1709644	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.0019	<0.001	<0.001	<0.001	<0.001
Mary Creek	Source	0021_SW002	0021_SW002_211019	19 Oct 2021	ES2138639	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW002	0021_SW002_220405	05 Apr 2022	ES2212442	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW002	0021_SW002_221013	13 Oct 2022	ES2237106	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW002	0021_SW002_230420	20 Apr 2023	ES2313364	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW002	0021_SW002_231018	18 Oct 2023	ES2336399	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05



Appendix B
Table B5f
Historical Water Analytical Results - Mary Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JB RF) (0021)
12626622

	PFAS - Perfluoroalkyl Sulfonamide						PFAS - Fluorotelomer Sulfonic Acids			
	N-Ethyl perfluorooctane sulfonamidacetic acid (EiFOSAA)	N-Ethyl perfluorooctane sulfonamidoethanol (EiFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidacetic 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
EQL	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%										
PFAS NEMP 3.0 2025 Recreational water quality										

Catchment	SPR	Location	Field ID	Date	Lab Report No.										
Mary Creek	Source	0021_SW002	0021_SW002_240411	11 Apr 2024	ES2412012	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW002	0021_SW002_251022	22 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW003	AB_SW03	20 Apr 2017	ES1709644	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Mary Creek	Source	0021_SW003	0021_SW003_211019	19 Oct 2021	ES2138639	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW003	0021_SW003_220405	05 Apr 2022	ES2212442	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW003	0021_QC205_221013	13 Oct 2022	308187	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Mary Creek	Source	0021_SW003	0021_SW003_221013	13 Oct 2022	ES2237106	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW003	0021_SW003_230420	20 Apr 2023	ES2313364	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW003	0021_SW003_240411	11 Apr 2024	ES2412012	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW003	0021_SW003_250403	03 Apr 2025	ES2510622	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW003	0021_SW003_250526	26 May 2025	ES2516045	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW003	0021_SW003_250704	04 Jul 2025	ES2520608	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW003	0021_SW003_250805	05 Aug 2025	ES2524252	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW004	AB_SW04	13 Apr 2017	ES1709064	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Mary Creek	Source	0021_SW004	TNQA08	13 Apr 2017	ES1709064	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Mary Creek	Source	0021_SW004	0021_SW004_211026	26 Oct 2021	ES2138639	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW004	0021_SW004_220406	06 Apr 2022	ES2212442	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW004	0021_SW004_221014	14 Oct 2022	ES2237106	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW004	0021_SW004_230421	21 Apr 2023	ES2313364	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW004	0021_SW004_240412	12 Apr 2024	ES2412012	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW004	0021_SW004_250402	02 Apr 2025	ES2510622	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW011	B_SW02	11 Apr 2017	ES1708884	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Mary Creek	Source	0021_SW011	0021_SW011_211020	20 Oct 2021	ES2138639	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW011	0021_SW011_220407	07 Apr 2022	ES2212442	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW011	0021_SW011_221012	12 Oct 2022	ES2237106	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW011	0021_SW011_230420	20 Apr 2023	ES2313364	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW011	0021_SW011_240410	10 Apr 2024	ES2412012	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW017	DC_SW02	13 Apr 2017	ES1709064	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.0008	<0.001	<0.001	<0.001	<0.001
Mary Creek	Source	0021_SW017	0021_QC206_220406	06 Apr 2022	293031	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Mary Creek	Source	0021_SW017	0021_SW017_220406	06 Apr 2022	ES2212442	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW017	0021_SW017_221014	14 Oct 2022	ES2237106	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW017	0021_SW017_250526	26 May 2025	ES2516045	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW017	0021_SW017_250704	04 Jul 2025	ES2520608	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW017	0021_SW017_250805	05 Aug 2025	ES2524252	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW017	0021_SW017_250825	25 Aug 2025	ES2526742	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW017	0021_SW017_250912	12 Sep 2025	ES2528885	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW110	0021_QC101_200804	04 Aug 2020	ES2027217	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Mary Creek	Source	0021_SW110	0021_QC201_200804	04 Aug 2020	736971	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.001	<0.001
Mary Creek	Source	0021_SW110	0021_SW110_200804	04 Aug 2020	ES2027217	<0.0016 ^{#2}	<0.004 ^{#2}	<0.004 ^{#2}	<0.0016 ^{#2}	<0.004 ^{#2}	<0.0016 ^{#2}	<0.002 ^{#2}	<0.002 ^{#2}	<0.002 ^{#2}	<0.002 ^{#2}
Mary Creek	Source	0021_SW110	0021_QC109_200810	10 Aug 2020	ES2028286	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.0010	<0.001	<0.001	<0.001	<0.001
Mary Creek	Source	0021_SW110	0021_QC209_200810	10 Aug 2020	737847	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.001	<0.001
Mary Creek	Source	0021_SW110	0021_SW110_200810	10 Aug 2020	ES2028286	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.0008	<0.001	<0.001	<0.001	<0.001
Mary Creek	Source	0021_SW110	0021_SW110_211019	19 Oct 2021	ES2138639	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW110	0021_QC100_211122	22 Nov 2021	ES2142514	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW110	0021_SW110_211122	22 Nov 2021	ES2142514	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW110	0021_SW110_220405	05 Apr 2022	ES2212442	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW110	0021_SW110_221013	13 Oct 2022	ES2237106	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW110	0021_QC111_230420	20 Apr 2023	ES2313364	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW110	0021_QC211_230420	20 Apr 2023	321517	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Mary Creek	Source	0021_SW110	0021_SW110_230420	20 Apr 2023	ES2313364	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW110	0021_SW110_231019	19 Oct 2023	ES2336399	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05

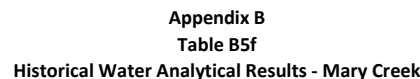


Appendix B
Table B5f
Historical Water Analytical Results - Mary Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Sulfonamide						PFAS - Fluorotelomer Sulfonic Acids			
	N-Ethyl perfluorooctane sulfonamidacetic acid (EiFOSAA)	N-Ethyl perfluorooctane sulfonamidoethanol (EiFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidacetic 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
EQL	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%										
PFAS NEMP 3.0 2025 Recreational water quality										

Catchment	SPR	Location	Field ID	Date	Lab Report No.										
Mary Creek	Source	0021_SW110	0021_QC110_240410	10 Apr 2024	ES2412012	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW110	0021_QC210_240410	10 Apr 2024	348825	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Mary Creek	Source	0021_SW110	0021_SW110_240410	10 Apr 2024	ES2412012	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW110	0021_QC108_241024	24 Oct 2024	ES2435541	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW110	0021_QC208_241024	24 Oct 2024	1156146	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Mary Creek	Source	0021_SW110	0021_SW110_241024	24 Oct 2024	ES2435541	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW110	0021_SW110_250403	03 Apr 2025	ES2510623	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW127	0021_QC122_200820	20 Aug 2020	EW2003840	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.0164	<0.001	0.009	<0.001	<0.001
Mary Creek	Source	0021_SW127	0021_SW127_200820	20 Aug 2020	EW2003840	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.0051	<0.001	0.008	<0.001	<0.001
Mary Creek	Source	0021_SW127	0021_QC105_211020	20 Oct 2021	ES2138639	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW127	0021_SW127_211020	20 Oct 2021	ES2138639	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW127	0021_SW127_211122	22 Nov 2021	ES2142514	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW127	0021_SW127_220407	07 Apr 2022	ES2212442	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW127	0021_SW127_221012	12 Oct 2022	ES2237106	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW127	0021_QC261_230202	02 Feb 2023	961609	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Mary Creek	Source	0021_SW127	0021_SW127_230202	02 Feb 2023	ES2303445	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW127	0021_SW127_230309	09 Mar 2023	ES2308203	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW127	0021_SW127_230420	20 Apr 2023	ES2313364	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW127	0021_QC100_230501	01 May 2023	ES2314437	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW127	0021_QC200_230501	01 May 2023	987074	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Mary Creek	Source	0021_SW127	0021_SW127_230501	01 May 2023	ES2314437	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW127	0021_SW127_230606	06 Jun 2023	ES2319084	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW127	0021_SW127_231018	18 Oct 2023	ES2336399	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW127	0021_SW127_240410	10 Apr 2024	ES2412012	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW127	0021_SW127_250401	01 Apr 2025	ES2510623	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_210831	31 Aug 2021	ES2131665	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_QC121_211111	11 Nov 2021	EW2104861	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111112211	11 Nov 2021	EW2104861	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111112313	11 Nov 2021	EW2104861	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_QC122_211112	12 Nov 2021	EW2104861	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_QC221_211112	12 Nov 2021	844059	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Mary Creek	Source	0021_SW153	0021_QC222_211112	12 Nov 2021	844059	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Mary Creek	Source	0021_SW153	0021_SW153_2111120014	12 Nov 2021	EW2104861	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111120115	12 Nov 2021	EW2104861	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111120216	12 Nov 2021	EW2104861	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111120317	12 Nov 2021	EW2104861	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111120418	12 Nov 2021	EW2104861	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111120520	12 Nov 2021	EW2104861	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111120621	12 Nov 2021	EW2104861	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111120722	12 Nov 2021	EW2104861	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111120823	12 Nov 2021	EW2104861	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111120924	12 Nov 2021	EW2104861	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111121025	12 Nov 2021	EW2104861	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111121127	12 Nov 2021	EW2104861	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111121228	12 Nov 2021	EW2104861	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111121329	12 Nov 2021	EW2104861	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111121430	12 Nov 2021	EW2104861	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111121531	12 Nov 2021	EW2104861	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111121632	12 Nov 2021	EW2104861	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111121734	12 Nov 2021	EW2104861	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111121835	12 Nov 2021	EW2104861	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05



Catchment	SPR	Location	Field ID	Date	Lab Report No.										
Mary Creek	Source	0021_SW153	0021_SW153_2111121936	12 Nov 2021	EW2104861		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2111122037	12 Nov 2021	EW2104861		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_QC123_211210	10 Dec 2021	ES2146373		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_QC223_211210	10 Dec 2021	852877		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01
Mary Creek	Source	0021_SW153	0021_SW153_2112100431	10 Dec 2021	ES2146373		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2112100833	10 Dec 2021	ES2146373		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2112101234	10 Dec 2021	ES2146373		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2112101635	10 Dec 2021	ES2146373		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2112102036	10 Dec 2021	ES2146373		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_QC124_211211	11 Dec 2021	ES2146373		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_QC224_211211	11 Dec 2021	852877		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01
Mary Creek	Source	0021_SW153	0021_SW153_2112110037	11 Dec 2021	ES2146373		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2112110438	11 Dec 2021	ES2146373		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2112110840	11 Dec 2021	ES2146373		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2112111642	11 Dec 2021	ES2146373		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2112112043	11 Dec 2021	ES2146373		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2112120445	12 Dec 2021	ES2146373		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2112120847	12 Dec 2021	ES2146373		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2112130051	13 Dec 2021	ES2146373		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2112131255	13 Dec 2021	ES2146373		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_QC102_202022	22 Feb 2022	ES2206899		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_QC103_202022	22 Feb 2022	ES2206899		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_QC202_202022	22 Feb 2022	868765		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01
Mary Creek	Source	0021_SW153	0021_QC203_202022	22 Feb 2022	868765		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01
Mary Creek	Source	0021_SW153	0021_SW153_2202220055	22 Feb 2022	ES2206899		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2202220156	22 Feb 2022	ES2206899		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2202220257	22 Feb 2022	ES2206899		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2202220358	22 Feb 2022	ES2206899		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2202220459	22 Feb 2022	ES2206899		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2202220803	22 Feb 2022	ES2206899		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2202221005	22 Feb 2022	ES2206899		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2202221106	22 Feb 2022	ES2206899		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2202221410	22 Feb 2022	ES2206899		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2202221713	22 Feb 2022	ES2206899		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2202222017	22 Feb 2022	ES2206899		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2202230022	23 Feb 2022	ES2206899		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_220408	08 Apr 2022	ES2212827		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2205120953	12 May 2022	ES2216861		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2205121054	12 May 2022	ES2216861		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2205121155	12 May 2022	ES2216861		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2205121257	12 May 2022	ES2216861		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2205121358	12 May 2022	ES2216861		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_2205121459	12 May 2022	ES2216861		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_221012	12 Oct 2022	ES2237106		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_QC112_230420	20 Apr 2023	ES2313364		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_QC212_230420	20 Apr 2023	321517		<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02
Mary Creek	Source	0021_SW153	0021_SW153_230420	20 Apr 2023	ES2313364		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_QC107_231018	18 Oct 2023	ES2336399		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_QC207_231018	18 Oct 2023	335876		<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02
Mary Creek	Source	0021_SW153	0021_SW153_231018	18 Oct 2023	ES2336399		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_240410	10 Apr 2024	ES2412012		<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05



Appendix B
Table B5f
Historical Water Analytical Results - Mary Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Sulfonamide						PFAS - Fluorotelomer Sulfonic Acids			
	N-Ethyl perfluorooctane sulfonamidacetic acid (EiFOSAA)	N-Ethyl perfluorooctane sulfonamidoethanol (EiFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidacetic 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
EQL	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%										
PFAS NEMP 3.0 2025 Recreational water quality										

Catchment	SPR	Location	Field ID	Date	Lab Report No.										
Mary Creek	Source	0021_SW153	0021_QC102_250331	31 Mar 2025	ES2510113	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_QC202_250331	31 Mar 2025	1210052	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Mary Creek	Source	0021_SW153	0021_SW153_250331	31 Mar 2025	ES2510623	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_QC100_250526	26 May 2025	ES2516045	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_QC200_250526	26 May 2025	1227520	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Mary Creek	Source	0021_SW153	0021_SW153_250526	26 May 2025	ES2516045	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_250702	02 Jul 2025	ES2520608	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_250805	05 Aug 2025	ES2524252	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_250825	25 Aug 2025	ES2526742	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_QC100_250912	12 Sep 2025	ES2528885	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	021_QC200_250912	12 Sep 2025	1269913	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Mary Creek	Source	0021_SW153	0021_SW153_250912	12 Sep 2025	ES2528885	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Source	0021_SW153	0021_SW153_251023	23 Oct 2025	ES2533538	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW021	MW021	01 May 2017	ES1710866	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Mary Creek	Pathway	0021_MW021	0021_MW021_241025	25 Oct 2024	ES2435541	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW021	0021_QC161_241025	25 Oct 2024	ES2435541	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW021	0021_QC261_241025	25 Oct 2024	1156146	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Mary Creek	Pathway	0021_MW021	0021_MW021_250401	01 Apr 2025	ES2510113	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW021	0021_MW021_251021	21 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW021	0021_QC124_251021	21 Oct 2025	ES2533538	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW021	0021_QC224_251021	21 Oct 2025	1285374	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Mary Creek	Pathway	0021_MW060	0021_MW060_210623	23 Jun 2021	ES2123994	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW060	0021_MW060_211122	22 Nov 2021	ES2142514	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW060	0021_MW060_241025	25 Oct 2024	ES2435541	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW060	0021_MW060_250130	30 Jan 2025	ES2503552	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW060	0021_MW060_250401	01 Apr 2025	ES2510113	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW060	0021_MW060_251023	23 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW070	0021_MW070_210623	23 Jun 2021	ES2123994	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW070	0021_QC202_211122	23 Nov 2021	845848	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Mary Creek	Pathway	0021_MW070	0021_MW070_211123	23 Nov 2021	ES2142514	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW070	0021_MW070_241025	25 Oct 2024	ES2435541	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW070	0021_MW070_250130	30 Jan 2025	ES2503552	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW070	0021_MW070_250407	07 Apr 2025	ES2510113	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW070	0021_MW070_251023	23 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW071	0021_MW071_210623	23 Jun 2021	ES2123994	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW071	0021_MW071_211123	23 Nov 2021	ES2142514	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW071	0021_QC102_211123	23 Nov 2021	ES2142514	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW071	0021_MW071_241025	25 Oct 2024	ES2435541	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW071	0021_MW071_250130	30 Jan 2025	ES2503552	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW071	0021_MW071_250407	07 Apr 2025	ES2510113	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW071	0021_MW071_251023	23 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW072	0021_MW072_210623	23 Jun 2021	ES2123994	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW072	0021_MW072_211123	23 Nov 2021	ES2142514	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW072	0021_MW072_241025	25 Oct 2024	ES2435541	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW072	0021_MW072_250130	30 Jan 2025	ES2503552	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW072	0021_MW072_250407	07 Apr 2025	ES2510113	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW072	0021_MW072_251023	23 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW112	B_MW03	28 Apr 2017	ES1710200	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Mary Creek	Pathway	0021_MW112	0021_MW112_210624	24 Jun 2021	ES2123994	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW112	0021_MW112_211020	20 Oct 2021	ES2138639	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW112	0021_MW112_211123	23 Nov 2021	ES2142514	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05



Appendix B
Table B5f
Historical Water Analytical Results - Mary Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Sulfonamide						PFAS - Fluorotelomer Sulfonic Acids			
	N-Ethyl perfluorooctane sulfonamidacetic acid (EiFOSAA)	N-Ethyl perfluorooctane sulfonamidoethanol (EiFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidacetic 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
EQL	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%										
PFAS NEMP 3.0 2025 Recreational water quality										

Catchment	SPR	Location	Field ID	Date	Lab Report No.										
Mary Creek	Pathway	0021_MW112	0021_MW112_220407	07 Apr 2022	ES2212442	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW112	0021_QC210_220407	07 Apr 2022	293031	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Mary Creek	Pathway	0021_MW112	0021_MW112_221012	12 Oct 2022	ES2237106	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW112	0021_MW112_230418	18 Apr 2023	ES2313364	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW112	0021_MW112_231016	16 Oct 2023	ES2336398	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW112	0021_MW112_240408	08 Apr 2024	ES2411994	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW112	0021_MW112_241024	24 Oct 2024	ES2435541	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW112	0021_MW112_250130	30 Jan 2025	ES2503552	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	0.44	<0.05	<0.05
Mary Creek	Pathway	0021_MW112	0021_MW112_250401	01 Apr 2025	ES2510113	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW112	0021_QC154_250401	01 Apr 2025	ES2510113	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW112	0021_MW112_251023	23 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW113	B_MW04	28 Apr 2017	ES1710200	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Mary Creek	Pathway	0021_MW113	B_MW04_180502	02 May 2018	ES1812871	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW113	0021_MW113_210623	23 Jun 2021	ES2123994	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW113	0021_MW113_211020	20 Oct 2021	ES2138639	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW113	0021_MW113_211123	23 Nov 2021	ES2142514	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW113	0021_MW113_220407	07 Apr 2022	ES2212442	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW113	0021_MW113_221013	13 Oct 2022	ES2237106	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW113	0021_MW113_230419	19 Apr 2023	ES2313364	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW113	0021_MW113_231018	18 Oct 2023	ES2336398	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW113	0021_MW113_240410	10 Apr 2024	ES2411994	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW113	0021_MW113_241024	24 Oct 2024	ES2435541	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW113	0021_QC109_241024	24 Oct 2024	ES2435541	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW113	0021_QC209_241024	24 Oct 2024	1156160	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Mary Creek	Pathway	0021_MW113	0021_MW113_250130	30 Jan 2025	ES2503552	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW113	0021_MW113_250130	30 Jan 2025	ES2503552	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW113	0021_MW113_250407	07 Apr 2025	ES2510113	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW133	MC_MW04_180411	11 Apr 2018	ES1810721	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Mary Creek	Pathway	0021_MW133	MC_MW04_180502	02 May 2018	ES1812871	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW133	0021_MW133_221012	11 Oct 2022	ES2237106	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW133	0021_MW133_230418	18 Apr 2023	ES2313364	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW133	0021_MW133_231017	17 Oct 2023	ES2336398	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW133	0021_MW133_240409	09 Apr 2024	ES2411994	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW133	0021_MW133_241023	23 Oct 2024	ES2435078	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW133	0021_MW133_250402	02 Apr 2025	ES2510113	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW133	0021_MW133_251021	21 Oct 2025	ES2533521	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW133	0021_QC103_251021	21 Oct 2025	ES2533538	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_MW133	0021_QC203_251021	21 Oct 2025	1285374	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Mary Creek	Pathway	0021_SW010	B_SW01	12 Apr 2017	ES1709064	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.0046	<0.001	<0.001	<0.001	<0.001
Mary Creek	Pathway	0021_SW010	B_SW01_180501	01 May 2018	ES1812871	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	0.003	<0.001	<0.001
Mary Creek	Pathway	0021_SW010	0021_SW010_211020	20 Oct 2021	ES2138639	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW010	0021_SW010_211122	22 Nov 2021	ES2142514	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW010	0021_SW010_220407	07 Apr 2022	ES2212442	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW010	0021_SW010_220512	12 May 2022	ES2216861	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW010	0021_SW010_221012	12 Oct 2022	ES2237106	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW010	0021_SW010_230202	02 Feb 2023	ES2303445	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW010	0021_SW010_230309	09 Mar 2023	ES2308203	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW010	0021_SW010_230419	19 Apr 2023	ES2313364	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW010	0021_SW010_230501	01 May 2023	ES2314437	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW010	0021_QC100_230606	06 Jun 2023	ES2319084	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW010	0021_SW010_230606	06 Jun 2023	ES2319084	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05



Appendix B
Table B5f
Historical Water Analytical Results - Mary Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Sulfonamide						PFAS - Fluorotelomer Sulfonic Acids			
	N-Ethyl perfluorooctane sulfonamidacetic acid (EiFOSAA)	N-Ethyl perfluorooctane sulfonamidoethanol (EiFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidacetic 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
EQL	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%										
PFAS NEMP 3.0 2025 Recreational water quality										

Catchment	SPR	Location	Field ID	Date	Lab Report No.										
Mary Creek	Pathway	0021_SW010	0021_SW010_230808	08 Aug 2023	ES2326813	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW010	0021_SW010_231212	12 Dec 2023	ES2343587	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW010	0021_SW010_240410	10 Apr 2024	ES2412012	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW010	0021_SW010_250130	30 Jan 2025	ES2503552	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW010	0021_SW010_250404	04 Apr 2025	ES2510622	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW010	0021_QC102_250805	05 Aug 2025	ES2524252	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW010	0021_QC202_250825	05 Aug 2025	1254110	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Mary Creek	Pathway	0021_SW010	0021_SW010_250805	05 Aug 2025	ES2524252	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW010	0021_SW010_250825	25 Aug 2025	ES2526742	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW010	0021_SW010_250912	12 Sep 2025	ES2528885	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW044	MC_SW02_180323	23 Mar 2018	ES1809241	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Mary Creek	Pathway	0021_SW044	MC_SW02_180430	30 Apr 2018	ES1812871	<0.0020 ^{#2}	<0.005 ^{#2}	<0.005 ^{#2}	<0.0020 ^{#2}	<0.005 ^{#2}	<0.0020 ^{#2}	<0.002 ^{#2}	<0.002 ^{#2}	<0.002 ^{#2}	<0.002 ^{#2}
Mary Creek	Pathway	0021_SW044	0021_SW044_220512	12 May 2022	ES2216861	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW044	0021_SW044_221011	11 Oct 2022	ES2237106	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW044	0021_SW044_230418	18 Apr 2023	ES2313364	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW044	0021_SW044_231017	17 Oct 2023	ES2336399	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW044	0021_QC203_240409	09 Apr 2024	348825	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Mary Creek	Pathway	0021_SW044	0021_SW044_240409	09 Apr 2024	ES2412012	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW044	0021_SW044_241028	28 Oct 2024	ES2435541	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW044	0021_SW044_250401	01 Apr 2025	ES2510622	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW044	0021_SW044_251021	21 Oct 2025	ES2533538	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW045	MC_SW03_180323	23 Mar 2018	ES1809241	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Mary Creek	Pathway	0021_SW045	MC_SW03_180430	30 Apr 2018	ES1812871	<0.0020 ^{#2}	<0.005 ^{#2}	<0.005 ^{#2}	<0.0020 ^{#2}	<0.005 ^{#2}	<0.0020 ^{#2}	<0.002 ^{#2}	<0.002 ^{#2}	<0.002 ^{#2}	<0.002 ^{#2}
Mary Creek	Pathway	0021_SW045	0021_SW045_220512	12 May 2022	ES2216861	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW045	0021_SW045_221011	11 Oct 2022	ES2237106	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW045	0021_SW045_230418	18 Apr 2023	ES2313364	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW045	0021_QC102_231017	17 Oct 2023	ES2336399	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW045	0021_QC202_231017	17 Oct 2023	335876	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Mary Creek	Pathway	0021_SW045	0021_SW045_231017	17 Oct 2023	ES2336399	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW045	0021_SW045_240409	09 Apr 2024	ES2412012	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW045	0021_SW045_241023	23 Oct 2024	ES2435078	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW045	0021_SW045_250401	01 Apr 2025	ES2510622	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW045	0021_SW045_251021	21 Oct 2025	ES2533538	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW048	MC_SW06_180406	06 Apr 2018	ES1810551	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Mary Creek	Pathway	0021_SW048	0021_SW048_221012	12 Oct 2022	ES2237106	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW048	0021_SW048_230419	19 Apr 2023	ES2313364	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW048	0021_SW048_231017	18 Oct 2023	ES2336399	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW048	0021_SW048_240410	10 Apr 2024	ES2412012	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW048	0021_SW048_241025	25 Oct 2024	ES2435541	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW048	0021_SW048_250403	03 Apr 2025	ES2510622	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW048	0021_SW048_251021	21 Oct 2025	ES2533538	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW053	MC_SW11_180430	30 Apr 2018	ES1812871	<0.0020 ^{#2}	<0.005 ^{#2}	<0.005 ^{#2}	<0.0020 ^{#2}	<0.005 ^{#2}	<0.0020 ^{#2}	<0.002 ^{#2}	<0.002 ^{#2}	<0.002 ^{#2}	<0.002 ^{#2}
Mary Creek	Pathway	0021_SW053	0021_SW053_220512	12 May 2022	ES2216861	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW053	0021_SW053_221011	11 Oct 2022	ES2237106	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW053	0021_SW053_230202	02 Feb 2023	ES2303445	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW053	0021_QC200_230309	09 Mar 2023	972744	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Mary Creek	Pathway	0021_SW053	0021_SW053_230309	09 Mar 2023	ES2308203	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW053	0021_QC101_230418	18 Apr 2023	ES2313364	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW053	0021_QC201_230418	18 Apr 2023	321517	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Mary Creek	Pathway	0021_SW053	0021_SW053_230418	18 Apr 2023	ES2313364	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW053	0021_SW053_230501	01 May 2023	ES2314437	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05



Appendix B
Table B5f
Historical Water Analytical Results - Mary Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JB RF) (0021)
12626622

	PFAS - Perfluoroalkyl Sulfonamide						PFAS - Fluorotelomer Sulfonic Acids			
	N-Ethyl perfluorooctane sulfonamidacetic acid (EiFOSAA)	N-Ethyl perfluorooctane sulfonamidoethanol (EiFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidacetic 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
EQL	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%										
PFAS NEMP 3.0 2025 Recreational water quality										

Catchment	SPR	Location	Field ID	Date	Lab Report No.										
Mary Creek	Pathway	0021_SW053	0021_QC200_230606	06 Jun 2023	998496	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Mary Creek	Pathway	0021_SW053	0021_SW053_230606	06 Jun 2023	ES2319084	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW053	0021_QC200_230808	08 Aug 2023	1016825	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Mary Creek	Pathway	0021_SW053	0021_SW053_230808	08 Aug 2023	ES2326813	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW053	0021_SW053_231017	17 Oct 2023	ES2336399	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW053	0021_QC100_231212	12 Dec 2023	ES2343587	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW053	0021_SW053_231212	12 Dec 2023	ES2343587	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW053	0021_QC103_240409	09 Apr 2024	ES2412012	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW053	0021_SW053_240409	09 Apr 2024	ES2412012	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW053	0021_SW053_241023	23 Oct 2024	ES2435078	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW053	0021_QC100_250129	29 Jan 2025	ES2503552	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW053	0021_QC200_250129	29 Jan 2025	1187025	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Mary Creek	Pathway	0021_SW053	0021_SW053_250129	29 Jan 2025	ES2503552	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW053	0021_SW053_250401	01 Apr 2025	ES2510622	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW053	0021_SW053_250805	05 Aug 2025	ES2524252	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW053	0021_SW053_250825	25 Aug 2025	ES2526742	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW053	0021_SW053_250912	12 Sep 2025	ES2528885	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Pathway	0021_SW053	0021_SW053_251021	21 Oct 2025	ES2533538	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Receptor	0021_SW043	MC_SW01_180320	20 Mar 2018	ES1808818	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Mary Creek	Receptor	0021_SW043	MC_SW01_180501	01 May 2018	ES1812871	<0.0020 ^{#2}	<0.005 ^{#2}	<0.005 ^{#2}	<0.0020 ^{#2}	<0.005 ^{#2}	<0.0020 ^{#2}	<0.002 ^{#2}	<0.002 ^{#2}	<0.002 ^{#2}	<0.002 ^{#2}
Mary Creek	Receptor	0021_SW043	0021_SW043_220512	12 May 2022	ES2216861	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Receptor	0021_SW043	0021_SW043_221012	12 Oct 2022	ES2237106	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Receptor	0021_SW043	0021_SW043_230418	18 Apr 2023	ES2313364	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Receptor	0021_SW043	0021_SW043_231017	17 Oct 2023	ES2336399	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Receptor	0021_SW043	0021_SW043_240409	09 Apr 2024	ES2412012	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Receptor	0021_SW043	0021_QC106_241023	23 Oct 2024	ES2435078	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Receptor	0021_SW043	0021_QC206_241023	23 Oct 2024	1154751	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Mary Creek	Receptor	0021_SW043	0021_SW043_241023	23 Oct 2024	ES2435078	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Receptor	0021_SW043	0021_SW043_250129	29 Jan 2025	ES2503552	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Receptor	0021_SW043	0021_SW043_250401	01 Apr 2025	ES2510622	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Receptor	0021_SW043	0021_QC102_251021	21 Oct 2025	ES2533538	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Receptor	0021_SW043	0021_QC202_251021	21 Oct 2025	1285374	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Mary Creek	Receptor	0021_SW043	0021_SW043_251021	21 Oct 2025	ES2533538	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Receptor	0021_SW052	MC_SW10_180320	20 Mar 2018	ES1808818	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Mary Creek	Receptor	0021_SW052	MC_SW10_180328	28 Mar 2018	ES1809328	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Mary Creek	Receptor	0021_SW052	0021_SW052_220512	12 May 2022	ES2216861	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Receptor	0021_SW052	0021_SW052_221012	12 Oct 2022	ES2237106	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Receptor	0021_SW052	0021_SW052_230418	18 Apr 2023	ES2313364	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Receptor	0021_SW052	0021_SW052_231017	17 Oct 2023	ES2336399	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Receptor	0021_SW052	0021_SW052_240409	09 Apr 2024	ES2412012	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Receptor	0021_SW052	0021_SW052_241023	23 Oct 2024	ES2435078	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Receptor	0021_SW052	0021_SW052_250129	29 Jan 2025	ES2503552	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Receptor	0021_SW052	0021_SW052_250401	01 Apr 2025	ES2510622	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Receptor	0021_SW052	0021_SW052_251021	21 Oct 2025	ES2533538	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Receptor	0021_SW211	0021_SW211_241023	23 Oct 2024	ES2435078	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Receptor	0021_SW211	0021_SW211_250403	03 Apr 2025	ES2510623	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Mary Creek	Receptor	0021_SW211	0021_SW211_251021	21 Oct 2025	ES2533538	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05

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 Reported Analyte LOR is higher than Requested Analyte LOR



Appendix B
Table B5g
Historical Water Analytical Results - RAN SSSS Tanks

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids			
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Sum of US EPA PFAS (PFOS + PFOA)*	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluorooctanoic acid (PFHpS)
EQL	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
0020_0021_Activity specific HHRA EPC for RAN SSSS	0.01	0.01	0.01	39.7	37				0.01	0.01	0.01	0.01

Catchment	SPR	Location	Field ID	Date	Lab Report No.												
RAN SSSS	Tank	0021_OTH001	A_S415_SW05	13 Oct 2017	ES1725662	4.22	4.62	0.32	12.3	8.84	11.5	-	-	0.55	<0.02	-	0.28
RAN SSSS	Tank	0021_OTH001	0021_OTH001_211021	21 Oct 2021	ES2138639	3.54	1.95	0.13	7.06	5.49	6.72	-	-	0.18	<0.02	-	0.14
RAN SSSS	Tank	0021_OTH001	0021_QC210_211021	21 Oct 2021	281322	3.1	1.7	0.11	6.3	4.7	-	3.2	-	0.16	<0.02	-	0.14
RAN SSSS	Tank	0021_OTH001	0021_OTH001_220405	05 Apr 2022	ES2212442	8.76	0.81	0.08	10.6	9.57	10.3	-	-	0.17	<0.02	-	0.14
RAN SSSS	Tank	0021_OTH001	0021_QC202_220405	05 Apr 2022	293031	7.2	0.86	0.09	9.1	8.1	-	7.3	-	0.14	<0.02	-	0.13
RAN SSSS	Tank	0021_OTH001	0021_OTH001_221013	13 Oct 2022	ES2237106	0.84	0.37	0.03	1.47	1.21	1.41	-	-	0.03	<0.02	-	0.02
RAN SSSS	Tank	0021_OTH001	0021_OTH001_230420	20 Apr 2023	ES2313364	2.24	0.90	0.07	3.76	3.14	3.61	-	-	0.06	<0.02	-	0.07
RAN SSSS	Tank	0021_OTH001	0021_OTH001_231019	19 Oct 2023	ES2336399	0.02	<0.01	<0.01	0.02	0.02	0.02	-	-	<0.02	<0.02	-	<0.02
RAN SSSS	Tank	0021_OTH001	0021_OTH001_240411	11 Apr 2024	ES2412012	0.01	<0.01	<0.01	0.01	0.01	0.01	-	-	<0.02	<0.02	-	<0.02
RAN SSSS	Tank	0021_OTH001	0021_OTH001_241025	25 Oct 2024	ES2435541	0.04	0.03	<0.01	0.07	0.07	0.07	-	-	<0.02	<0.02	-	<0.02
RAN SSSS	Tank	0021_OTH001	0021_OTH001_250407	07 Apr 2025	ES2510113	0.06	0.02	<0.01	0.08	0.08	0.08	-	-	<0.02	<0.02	-	<0.02
RAN SSSS	Tank	0021_OTH001	0021_QC157_250407	07 Apr 2025	ES2510113	0.06	0.01	<0.01	0.07	0.07	0.07	-	-	<0.02	<0.02	-	<0.02
RAN SSSS	Tank	0021_OTH001	0021_QC257_250407	07 Apr 2025	1210052	0.06	0.05	<0.01	0.11	0.11	0.11	0.06	0.11	<0.01	<0.01	<0.01	<0.01
RAN SSSS	Tank	0021_OTH001	0021_OTH001_251022	22 Oct 2025	ES2533521	0.05	0.03	<0.01	0.08	0.08	0.08	-	-	<0.02	<0.02	-	<0.02
RAN SSSS	Tank	0021_OTH002	A_S416_SW02	13 Oct 2017	ES1725662	1.16	0.83	0.06	2.64	1.99	2.52	-	-	0.08	<0.02	-	0.04
RAN SSSS	Tank	0021_OTH002	0021_OTH002_211021	21 Oct 2021	ES2138639	0.71	0.39	0.05	1.51	1.10	1.44	-	-	0.04	<0.02	-	0.02
RAN SSSS	Tank	0021_OTH002	0021_OTH002_220405	05 Apr 2022	ES2212442	0.66	0.36	0.05	1.44	1.02	1.40	-	-	0.05	<0.02	-	<0.02
RAN SSSS	Tank	0021_OTH002	0021_OTH002_221013	13 Oct 2022	ES2237106	0.66	0.40	0.06	1.55	1.06	1.51	-	-	0.04	<0.02	-	<0.02
RAN SSSS	Tank	0021_OTH002	0021_OTH002_230420	20 Apr 2023	ES2313364	0.96	0.59	0.09	2.38	1.55	2.25	-	-	0.06	<0.02	-	0.03
RAN SSSS	Tank	0021_OTH002	0021_OTH002_231019	19 Oct 2023	ES2336399	0.56	0.29	0.05	1.25	0.85	1.22	-	-	0.03	<0.02	-	<0.02
RAN SSSS	Tank	0021_OTH002	0021_OTH002_240410	10 Apr 2024	ES2412012	0.60	0.27	0.06	1.22	0.87	1.19	-	-	0.02	<0.02	-	<0.02
RAN SSSS	Tank	0021_OTH002	0021_OTH002_241025	25 Oct 2024	ES2435541	0.68	0.30	0.05	1.55	0.98	1.32	-	-	0.03	<0.02	-	<0.02
RAN SSSS	Tank	0021_OTH002	0021_OTH002_250407	07 Apr 2025	ES2510113	0.61	0.25	0.06	1.27	0.86	1.22	-	-	0.02	<0.02	-	<0.02
RAN SSSS	Tank	0021_OTH002	0021_OTH002_251022	22 Oct 2025	ES2533521	0.54	0.28	0.06	1.28	0.82	1.23	-	-	0.03	<0.02	-	<0.02
RAN SSSS	Tank	0021_OTH006	A_S481_SW04	13 Oct 2017	ES1725662	0.04	0.15	0.01	0.63	0.19	0.59	-	-	0.08	<0.02	-	<0.02
RAN SSSS	Tank	0021_OTH006	0021_OTH006_211021	21 Oct 2021	ES2138639	<0.01	0.03	<0.01	0.38	0.03	0.36	-	-	0.05	<0.02	-	<0.02
RAN SSSS	Tank	0021_OTH006	0021_QC110_211021	21 Oct 2021	ES2138639	<0.01	0.03	<0.01	0.46	0.03	0.44	-	-	0.06	<0.02	-	<0.02
RAN SSSS	Tank	0021_OTH006	0021_OTH006_220405	05 Apr 2022	ES2212442	0.47	0.15	0.01	0.90	0.62	0.90	-	-	0.05	<0.02	-	<0.02
RAN SSSS	Tank	0021_OTH006	0021_OTH006_221013	13 Oct 2022	ES2237106	<0.01	0.02	<0.01	0.23	0.02	0.23	-	-	0.03	<0.02	-	<0.02
RAN SSSS	Tank	0021_OTH006	0021_OTH006_230420	20 Apr 2023	ES2313364	0.02	0.03	<0.01	0.30	0.05	0.30	-	-	0.04	<0.02	-	<0.02
RAN SSSS	Tank	0021_OTH006	0021_OTH006_231019	19 Oct 2023	ES2336399	<0.01	<0.01	<0.01	0.10	<0.01	0.10	-	-	<0.02	<0.02	-	<0.02
RAN SSSS	Tank	0021_OTH006	0021_OTH006_240411	11 Apr 2024	ES2412012	<0.01	<0.01	<0.01	0.02	<0.01	0.02	-	-	<0.02	<0.02	-	<0.02
RAN SSSS	Tank	0021_OTH006	0021_OTH006_241025	25 Oct 2024	ES2435541	<0.01	<0.01	<0.01	0.02	<0.01	0.02	-	-	<0.02	<0.02	-	<0.02
RAN SSSS	Tank	0021_OTH006	0021_QC160_241025	25 Oct 2024	ES2435541	<0.01	<0.01	<0.01	0.03	<0.01	0.03	-	-	<0.02	<0.02	-	<0.02
RAN SSSS	Tank	0021_OTH006	0021_OTH006_250407	07 Apr 2025	ES2510113	<0.01	<0.01	<0.01	0.02	<0.01	0.02	-	-	<0.02	<0.02	-	<0.02
RAN SSSS	Tank	0021_OTH006	0021_OTH006_251022	22 Oct 2025	ES2533521	<0.01	<0.01	<0.01	0.03	<0.01	0.03	-	-	<0.02	<0.02	-	<0.02
RAN SSSS	Tank	0021_OTH006	0021_QC104_251022	22 Oct 2025	ES2533538	<0.01	<0.01	<0.01	0.03	<0.01	0.03	-	-	<0.02	<0.02	-	<0.02
RAN SSSS	Tank	0021_OTH006	0021_QC204_251022	22 Oct 2025	1285374	<0.01	<0.01	<0.01	<0.1	<0.01	0.06	-	-	0.02	<0.01	<0.01	<0.01



	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids			
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Sum of US EPA PFAS (PFOS + PFOA) *	Sum of enHealth PFAS (PFHxS + PFOS + PFOA) *	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluorooctanoic acid (PFHpS)
EQL	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
0020_0021_Activity specific HHRA EPC for RAN SSSS	0.01	0.01	0.01	39.7	37				0.01	0.01	0.01	0.01

Statistics

Number of Results	38	38	38	38	38	36	3	1	38	38	2	38
Number of Detects	27	28	19	37	30	36	3	1	24	0	0	10
Minimum Concentration	0.01	0.01	0.01	0.01	0.01	0.01	0.06	0.11	<0.01	<0.01	<0.01	<0.01
Minimum Detect	0.01	0.01	0.01	0.01	0.01	0.01	0.06	0.11	0.02	ND	ND	0.02
Maximum Concentration	8.76	4.62	0.32	12.3	9.57	11.5	7.3	0.11	0.55	<0.02	<0.01	0.28
Maximum Detect	8.76	4.62	0.32	12.3	9.57	11.5	7.3	0.11	0.55	ND	ND	0.28
Average Concentration *	1	0.42	0.04	1.9	1.4	1.5	3.5		0.057	0.0097	0.005	0.034
Geometric Average *	0.11	0.075	0.017	0.38	0.17	0.32	1.1	0.11	0.029	0.0096	0.005	0.016
Median Concentration *	0.06	0.1	0.0075	0.545	0.15	0.4	3.2	0.11	0.03	0.01	0.005	0.01
Standard Deviation *	2	0.83	0.058	3.1	2.5	2.7	3.6		0.094	0.0011	0	0.057
Geometric Standard Deviation *	13	8.6	3.9	8.2	13	7.5	13		3	1.2	1	2.8
95% UCL (Student's-t) *	1.534	0.643	0.0564	2.695	2.103	2.207	9.641		0.0825	0.01	0.005	0.0494
Number of Env Standard Exceedances	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
% of Detects	71	74	50	97	79	100	100	100	63	0	0	26
% of Non-Detects	29	26	50	3	21	0	0	0	37	100	100	74
% of Detects at or above Env Standards	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

* A Non Detect Multiplier of 0.5 has been applied.



Appendix B
Table B5g
Historical Water Analytical Results - RAN SSSS Tanks

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

ds	PFAS - Perfluoroalkyl Carboxylic Acids											
	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnDA)
	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	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0020_0021_Activity specific HHRA EPC for RAN SSSS												

Catchment	SPR	Location	Field ID	Date	Lab Report No.												
RAN SSSS	Tank	0021_OTH001	A_S415_SW05	13 Oct 2017	ES1725662	-	0.50	<0.1	<0.02	<0.02	0.15	1.42	<0.02	0.20	<0.05	<0.02	<0.02
RAN SSSS	Tank	0021_OTH001	0021_OTH001_211021	21 Oct 2021	ES2138639	-	0.20	<0.1	<0.02	<0.02	0.06	0.64	<0.02	0.14	<0.05	<0.02	<0.02
RAN SSSS	Tank	0021_OTH001	0021_QC210_211021	21 Oct 2021	281322	-	0.14	0.1	<0.02	<0.05	0.06	0.62	<0.01	0.1	<0.5	<0.1	<0.02
RAN SSSS	Tank	0021_OTH001	0021_OTH001_220405	05 Apr 2022	ES2212442	-	0.08	<0.1	<0.02	<0.02	0.02	0.45	<0.02	0.05	<0.05	<0.02	<0.02
RAN SSSS	Tank	0021_OTH001	0021_QC202_220405	05 Apr 2022	293031	-	0.09	0.03	<0.02	<0.05	0.03	0.44	<0.01	0.06	<0.5	<0.1	<0.02
RAN SSSS	Tank	0021_OTH001	0021_OTH001_221013	13 Oct 2022	ES2237106	-	0.04	<0.1	<0.02	<0.02	<0.02	0.12	<0.02	0.02	<0.05	<0.02	<0.02
RAN SSSS	Tank	0021_OTH001	0021_OTH001_230420	20 Apr 2023	ES2313364	-	0.08	<0.1	<0.02	<0.02	0.03	0.26	<0.02	0.05	<0.05	<0.02	<0.02
RAN SSSS	Tank	0021_OTH001	0021_OTH001_231019	19 Oct 2023	ES2336399	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
RAN SSSS	Tank	0021_OTH001	0021_OTH001_240411	11 Apr 2024	ES2412012	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
RAN SSSS	Tank	0021_OTH001	0021_OTH001_241025	25 Oct 2024	ES2435541	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
RAN SSSS	Tank	0021_OTH001	0021_OTH001_250407	07 Apr 2025	ES2510113	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
RAN SSSS	Tank	0021_OTH001	0021_QC157_250407	07 Apr 2025	ES2510113	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
RAN SSSS	Tank	0021_OTH001	0021_QC257_250407	07 Apr 2025	1210052	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
RAN SSSS	Tank	0021_OTH001	0021_OTH001_251022	22 Oct 2025	ES2533521	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
RAN SSSS	Tank	0021_OTH002	A_S416_SW02	13 Oct 2017	ES1725662	-	0.08	<0.1	<0.02	<0.02	0.03	0.32	<0.02	0.04	<0.05	<0.02	<0.02
RAN SSSS	Tank	0021_OTH002	0021_OTH002_211021	21 Oct 2021	ES2138639	-	0.05	<0.1	<0.02	<0.02	0.02	0.19	<0.02	0.04	<0.05	<0.02	<0.02
RAN SSSS	Tank	0021_OTH002	0021_OTH002_220405	05 Apr 2022	ES2212442	-	0.04	<0.1	<0.02	<0.02	0.02	0.23	<0.02	0.03	<0.05	<0.02	<0.02
RAN SSSS	Tank	0021_OTH002	0021_OTH002_221013	13 Oct 2022	ES2237106	-	0.04	<0.1	<0.02	<0.02	0.02	0.29	<0.02	0.04	<0.05	<0.02	<0.02
RAN SSSS	Tank	0021_OTH002	0021_OTH002_230420	20 Apr 2023	ES2313364	-	0.07	<0.1	0.03	<0.02	0.04	0.44	<0.02	0.07	<0.05	<0.02	<0.02
RAN SSSS	Tank	0021_OTH002	0021_OTH002_231019	19 Oct 2023	ES2336399	-	0.03	<0.1	<0.02	<0.02	<0.02	0.25	<0.02	0.04	<0.05	<0.02	<0.02
RAN SSSS	Tank	0021_OTH002	0021_OTH002_240410	10 Apr 2024	ES2412012	-	0.03	<0.1	<0.02	<0.02	0.02	0.19	<0.02	0.03	<0.05	<0.02	<0.02
RAN SSSS	Tank	0021_OTH002	0021_OTH002_241025	25 Oct 2024	ES2435541	-	0.03	<0.1	0.03	0.11	<0.02	0.23	<0.02	0.03	<0.05	0.04	0.02
RAN SSSS	Tank	0021_OTH002	0021_OTH002_250407	07 Apr 2025	ES2510113	-	0.03	<0.1	0.02	<0.02	0.02	0.22	<0.02	0.04	<0.05	<0.02	<0.02
RAN SSSS	Tank	0021_OTH002	0021_OTH002_251022	22 Oct 2025	ES2533521	-	0.03	<0.1	0.02	<0.02	0.02	0.26	<0.02	0.04	<0.05	<0.02	<0.02
RAN SSSS	Tank	0021_OTH006	A_S481_SW04	13 Oct 2017	ES1725662	-	0.04	<0.1	<0.02	<0.02	<0.02	0.21	<0.02	0.10	<0.05	<0.02	<0.02
RAN SSSS	Tank	0021_OTH006	0021_OTH006_211021	21 Oct 2021	ES2138639	-	0.02	<0.1	<0.02	<0.02	<0.02	0.19	<0.02	0.09	<0.05	<0.02	<0.02
RAN SSSS	Tank	0021_OTH006	0021_QC110_211021	21 Oct 2021	ES2138639	-	0.02	<0.1	<0.02	<0.02	<0.02	0.24	<0.02	0.11	<0.05	<0.02	<0.02
RAN SSSS	Tank	0021_OTH006	0021_OTH006_220405	05 Apr 2022	ES2212442	-	<0.02	<0.1	<0.02	<0.02	<0.02	0.16	<0.02	0.06	<0.05	<0.02	<0.02
RAN SSSS	Tank	0021_OTH006	0021_OTH006_221013	13 Oct 2022	ES2237106	-	<0.02	<0.1	<0.02	<0.02	<0.02	0.12	<0.02	0.06	<0.05	<0.02	<0.02
RAN SSSS	Tank	0021_OTH006	0021_OTH006_230420	20 Apr 2023	ES2313364	-	<0.02	<0.1	<0.02	<0.02	<0.02	0.14	<0.02	0.07	<0.05	<0.02	<0.02
RAN SSSS	Tank	0021_OTH006	0021_OTH006_231019	19 Oct 2023	ES2336399	-	<0.02	<0.1	<0.02	<0.02	<0.02	0.07	<0.02	0.03	<0.05	<0.02	<0.02
RAN SSSS	Tank	0021_OTH006	0021_OTH006_240411	11 Apr 2024	ES2412012	-	<0.02	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02
RAN SSSS	Tank	0021_OTH006	0021_OTH006_241025	25 Oct 2024	ES2435541	-	<0.02	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02
RAN SSSS	Tank	0021_OTH006	0021_QC160_241025	25 Oct 2024	ES2435541	-	<0.02	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02
RAN SSSS	Tank	0021_OTH006	0021_OTH006_250407	07 Apr 2025	ES2510113	-	<0.02	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02
RAN SSSS	Tank	0021_OTH006	0021_OTH006_251022	22 Oct 2025	ES2533521	-	<0.02	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02
RAN SSSS	Tank	0021_OTH006	0021_QC104_251022	22 Oct 2025	ES2533538	-	<0.02	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05	<0.02	<0.02
RAN SSSS	Tank	0021_OTH006	0021_QC204_251022	22 Oct 2025	1285374	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	0.03	<0.01	0.01	<0.01	<0.01	<0.01



ds	PFAS - Perfluoroalkyl Carboxylic Acids											
	Perfluoropropanesulfo nic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluorohexanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnDA)
	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	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0020_0021_Activity specific HHRA EPC for RAN SSSS												

Statistics

Number of Results	2	38	38	38	38	38	38	38	38	38	38	38
Number of Detects	0	20	2	4	1	14	31	0	25	0	1	1
Minimum Concentration	<0.01	<0.01	0.03	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01
Minimum Detect	ND	0.02	0.03	0.02	0.11	0.02	0.02	ND	0.01	ND	0.04	0.02
Maximum Concentration	<0.01	0.5	0.1	0.03	0.11	0.15	1.42	<0.02	0.2	<0.5	<0.1	0.02
Maximum Detect	ND	0.5	0.1	0.03	0.11	0.15	1.42	ND	0.2	ND	0.04	0.02
Average Concentration *	0.005	0.048	0.049	0.011	0.013	0.02	0.21	0.0095	0.044	0.036	0.013	0.01
Geometric Average *	0.005	0.024	0.048	0.011	0.011	0.015	0.091	0.0093	0.029	0.026	0.011	0.0098
Median Concentration *	0.005	0.02	0.05	0.01	0.01	0.01	0.175	0.01	0.035	0.025	0.01	0.01
Standard Deviation *	0	0.086	0.011	0.0052	0.017	0.025	0.26	0.0016	0.042	0.051	0.01	0.002
Geometric Standard Deviation *	1	2.9	1.2	1.4	1.6	2	4.5	1.2	2.6	1.9	1.6	1.2
95% UCL (Student's-t) *	0.005	0.0711	0.0524	0.0127	0.0177	0.0272	0.281	0.0099	0.0557	0.0498	0.0154	0.0106
Number of Env Standard Exceedances	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
% of Detects	0	53	5	11	3	37	82	0	66	0	3	3
% of Non-Detects	100	47	95	89	97	63	18	100	34	100	97	97
% of Detects at or above Env Standards	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

* A Non Detect Multiplier of 0.5 has been applied.



Appendix B
Table B5g
Historical Water Analytical Results - RAN SSSS Tanks

	PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
	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
EQL	0.05	0.02	0.05	0.05	0.02	0.05	0.02	0.01	0.01	0.01	0.01
0020_0021_Activity specific HHRA EPC for RAN SSSS											

Catchment	SPR	Location	Field ID	Date	Lab Report No.											
RAN SSSS	Tank	0021_OTH001	A_S415_SW05	13 Oct 2017	ES1725662	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
RAN SSSS	Tank	0021_OTH001	0021_OTH001_211021	21 Oct 2021	ES2138639	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	0.08	<0.05	<0.05
RAN SSSS	Tank	0021_OTH001	0021_QC210_211021	21 Oct 2021	281322	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	0.07	<0.02	<0.02
RAN SSSS	Tank	0021_OTH001	0021_OTH001_220405	05 Apr 2022	ES2212442	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	0.03	<0.05	<0.05	<0.05	<0.05
RAN SSSS	Tank	0021_OTH001	0021_QC202_220405	05 Apr 2022	293031	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
RAN SSSS	Tank	0021_OTH001	0021_OTH001_221013	13 Oct 2022	ES2237106	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
RAN SSSS	Tank	0021_OTH001	0021_OTH001_230420	20 Apr 2023	ES2313364	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
RAN SSSS	Tank	0021_OTH001	0021_OTH001_231019	19 Oct 2023	ES2336399	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
RAN SSSS	Tank	0021_OTH001	0021_OTH001_240411	11 Apr 2024	ES2412012	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
RAN SSSS	Tank	0021_OTH001	0021_OTH001_241025	25 Oct 2024	ES2435541	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
RAN SSSS	Tank	0021_OTH001	0021_OTH001_250407	07 Apr 2025	ES2510113	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
RAN SSSS	Tank	0021_OTH001	0021_QC157_250407	07 Apr 2025	ES2510113	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
RAN SSSS	Tank	0021_OTH001	0021_QC257_250407	07 Apr 2025	1210052	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
RAN SSSS	Tank	0021_OTH001	0021_OTH001_251022	22 Oct 2025	ES2533521	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
RAN SSSS	Tank	0021_OTH002	A_S416_SW02	13 Oct 2017	ES1725662	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
RAN SSSS	Tank	0021_OTH002	0021_OTH002_211021	21 Oct 2021	ES2138639	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
RAN SSSS	Tank	0021_OTH002	0021_OTH002_220405	05 Apr 2022	ES2212442	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
RAN SSSS	Tank	0021_OTH002	0021_OTH002_221013	13 Oct 2022	ES2237106	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
RAN SSSS	Tank	0021_OTH002	0021_OTH002_230420	20 Apr 2023	ES2313364	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
RAN SSSS	Tank	0021_OTH002	0021_OTH002_231019	19 Oct 2023	ES2336399	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
RAN SSSS	Tank	0021_OTH002	0021_OTH002_240410	10 Apr 2024	ES2412012	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
RAN SSSS	Tank	0021_OTH002	0021_OTH002_241025	25 Oct 2024	ES2435541	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
RAN SSSS	Tank	0021_OTH002	0021_OTH002_250407	07 Apr 2025	ES2510113	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
RAN SSSS	Tank	0021_OTH002	0021_OTH002_251022	22 Oct 2025	ES2533521	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
RAN SSSS	Tank	0021_OTH006	A_S481_SW04	13 Oct 2017	ES1725662	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
RAN SSSS	Tank	0021_OTH006	0021_OTH006_211021	21 Oct 2021	ES2138639	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
RAN SSSS	Tank	0021_OTH006	0021_QC110_211021	21 Oct 2021	ES2138639	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
RAN SSSS	Tank	0021_OTH006	0021_OTH006_220405	05 Apr 2022	ES2212442	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
RAN SSSS	Tank	0021_OTH006	0021_OTH006_221013	13 Oct 2022	ES2237106	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
RAN SSSS	Tank	0021_OTH006	0021_OTH006_230420	20 Apr 2023	ES2313364	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
RAN SSSS	Tank	0021_OTH006	0021_OTH006_231019	19 Oct 2023	ES2336399	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
RAN SSSS	Tank	0021_OTH006	0021_OTH006_240411	11 Apr 2024	ES2412012	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
RAN SSSS	Tank	0021_OTH006	0021_OTH006_241025	25 Oct 2024	ES2435541	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
RAN SSSS	Tank	0021_OTH006	0021_QC160_241025	25 Oct 2024	ES2435541	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
RAN SSSS	Tank	0021_OTH006	0021_OTH006_250407	07 Apr 2025	ES2510113	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
RAN SSSS	Tank	0021_OTH006	0021_OTH006_251022	22 Oct 2025	ES2533521	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
RAN SSSS	Tank	0021_OTH006	0021_QC104_251022	22 Oct 2025	ES2533538	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
RAN SSSS	Tank	0021_OTH006	0021_QC204_251022	22 Oct 2025	1285374	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01



	PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
	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
EQL	0.05	0.02	0.05	0.05	0.02	0.05	0.02	0.01	0.01	0.01	0.01
0020_0021_Activity specific HHRA EPC for RAN SSSS											

Statistics

Number of Results	38	38	38	38	38	38	38	38	38	38	38
Number of Detects	0	0	0	0	0	0	1	0	2	0	0
Minimum Concentration	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.01	<0.01	<0.01	<0.01
Minimum Detect	ND	ND	ND	ND	ND	ND	0.03	ND	0.07	ND	ND
Maximum Concentration	<0.1	<0.05	<0.5	<0.05	<0.05	<0.05	<0.1	<0.05	0.08	<0.05	<0.05
Maximum Detect	ND	ND	ND	ND	ND	ND	0.03	ND	0.08	ND	ND
Average Concentration *	0.026	0.011	0.037	0.025	0.011	0.025	0.013	0.023	0.027	0.023	0.023
Geometric Average *	0.026	0.01	0.028	0.025	0.01	0.025	0.012	0.021	0.025	0.022	0.022
Median Concentration *	0.025	0.01	0.025	0.025	0.01	0.025	0.01	0.025	0.025	0.025	0.025
Standard Deviation *	0.0057	0.0034	0.051	0	0.0034	0	0.0099	0.0062	0.012	0.0055	0.0055
Geometric Standard Deviation *	1.2	1.2	1.7	1	1.2	1	1.5	1.6	1.4	1.5	1.5
95% UCL (Student's-t) *	0.0279	0.0117	0.0508	0.025	0.0117	0.025	0.0161	0.0246	0.0304	0.0247	0.0247
Number of Env Standard Exceedances	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
% of Detects	0	0	0	0	0	0	3	0	5	0	0
% of Non-Detects	100	100	100	100	100	100	97	100	95	100	100
% of Detects at or above Env Standards	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

* A Non Detect Multiplier of 0.5 has been applied.



Appendix B
Table B5h
Historical Water Analytical Results - HMAS Creswell STP

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS			PFAS - Sums				PFAS - Perfluoroalkyl Sulfonic Acids				
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Sum of US EPA PFAS (PFOS + PFOA)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPrS)
	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	0.0003	0.0005	0.0005	0.0003	0.0003	0.0003	0.01	0.0005	0.0005	0.01	0.0005	0.01

Catchment	SPR	Location	Field ID	Date	Lab Report No.												
HMAS Creswell STP	Tank	0020_SW037	G_SW03	12 Apr 2017	ES1709064	0.656	0.479	0.0273	1.31	1.14	1.24	-	0.0249	<0.0005	-	0.0288	-
HMAS Creswell STP	Tank	0020_SW037	0020_QC202_211018	18 Oct 2021	281319	0.65	0.46	0.03	1.3	1.1	-	0.67	0.04	<0.02	-	0.03	-
HMAS Creswell STP	Tank	0020_SW037	0020_SW037_211018	18 Oct 2021	ES2138638	0.66	0.41	0.02	1.33	1.07	1.27	-	0.10	<0.02	-	0.02	-
HMAS Creswell STP	Tank	0020_SW037	0020_SW037_220404	04 Apr 2022	ES2212597	0.91	0.44	0.03	1.57	1.35	1.52	-	0.04	<0.02	-	0.02	-
HMAS Creswell STP	Tank	0020_SW037	0020_QC202_221011	11 Oct 2022	308190	0.64	0.31	0.01	1.0	0.95	-	0.65	0.01	<0.02	-	0.02	-
HMAS Creswell STP	Tank	0020_SW037	0020_SW037_221011	11 Oct 2022	ES2237104	0.72	0.40	0.02	1.26	1.12	1.23	-	0.04	<0.02	-	<0.02	-
HMAS Creswell STP	Tank	0020_SW037	0020_SW037_230417	17 Apr 2023	ES2313254	0.61	0.42	0.02	1.20	1.03	1.15	-	0.04	<0.02	-	0.02	-
HMAS Creswell STP	Tank	0020_SW037	0020_SW037_240408	08 Apr 2024	ES2411964	0.55	0.33	0.02	0.99	0.88	0.97	-	0.03	<0.02	-	<0.02	-
HMAS Creswell STP	Tank	0020_SW037	0020_SW037_241021	21 Oct 2024	ES2435143	0.21	0.08	<0.01	0.29	0.29	0.29	-	<0.02	<0.02	-	<0.02	-
HMAS Creswell STP	Tank	0020_SW037	0020_SW037_250331	31 Mar 2025	ES2510618	0.31	0.18	<0.01	0.49	0.49	0.49	-	<0.02	<0.02	-	<0.02	-
HMAS Creswell STP	Tank	0020_SW037	0020_QC100_251020	20 Oct 2025	ES2533546	0.34	0.22	0.02	0.65	0.56	0.65	-	0.03	<0.02	-	<0.02	-
HMAS Creswell STP	Tank	0020_SW037	0020_QC200_251020	20 Oct 2025	1285219	0.37 ^{#1}	0.22 ^{#1}	0.02 ^{#1}	0.7	0.59	0.66	-	0.02	<0.01	<0.01	0.01 ^{#1}	<0.01
HMAS Creswell STP	Tank	0020_SW037	0020_SW037_251020	20 Oct 2025	ES2533546	0.35	0.14	0.01	0.53	0.49	0.53	-	0.03	<0.02	-	<0.02	-

Statistics													
Number of Results	13	13	13	13	13	11	2	13	13	1	13	1	
Number of Detects	13	13	11	13	13	11	2	11	0	0	7	0	
Minimum Concentration	0.21	0.08	0.01	0.29	0.29	0.29	0.65	0.01	<0.0005	<0.01	0.01	<0.01	
Minimum Detect	0.21	0.08	0.01	0.29	0.29	0.29	0.65	0.01	ND	ND	0.01	ND	
Maximum Concentration	0.91	0.479	0.03	1.57	1.35	1.52	0.67	0.1	<0.02	<0.01	0.03	<0.01	
Maximum Detect	0.91	0.479	0.03	1.57	1.35	1.52	0.67	0.1	ND	ND	0.03	ND	
Average Concentration *	0.54	0.31	0.018	0.97	0.85	0.91	0.66	0.033	0.0089		0.016		
Geometric Average *	0.5	0.28	0.016	0.88	0.78	0.82	0.66	0.027	0.0071	0.005	0.015	0.005	
Median Concentration *	0.61	0.33	0.02	1	0.95	0.97	0.66	0.03	0.01	0.005	0.01	0.005	
Standard Deviation *	0.2	0.13	0.0085	0.4	0.33	0.4	0.014	0.023	0.0029		0.0075		
Geometric Standard Deviation *	1.5	1.7	1.8	1.7	1.6	1.7	1	2	2.8		1.6		
95% UCL (Student's-t) *	0.637	0.38	0.0224	1.168	1.013	1.128	0.723	0.0442	0.0103		0.0198		
Number of Env Standard Exceedances	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	
% of Detects	100	100	85	100	100	100	100	85	0	0	54	0	
% of Non-Detects	0	0	15	0	0	0	0	15	100	100	46	100	
% of Detects at or above Env Standards	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	

* 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.



Appendix B
Table B5h
Historical Water Analytical Results - HMAS Creswell STP

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Carboxylic Acids											
	Perfluoropentane sulfonic acid (PFPeS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTTrDA)	Perfluoroundecanoic acid (PFUnDA)	
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
EQL	0.0005	0.002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.001

Catchment	SPR	Location	Field ID	Date	Lab Report No.												
HMAS Creswell STP	Tank	0020_SW037	G_SW03	12 Apr 2017	ES1709064	0.0375	<0.002	0.0013	<0.0005	0.0079	0.0405	0.0009	0.0069	<0.0005	<0.0005	<0.0005	<0.001
HMAS Creswell STP	Tank	0020_SW037	0020_QC202_211018	18 Oct 2021	281319	0.04	<0.02	<0.02	<0.05	0.01	0.07	<0.01	<0.02	<0.5	<0.1	<0.02	<0.1
HMAS Creswell STP	Tank	0020_SW037	0020_SW037_211018	18 Oct 2021	ES2138638	0.04	<0.1	<0.02	<0.02	<0.02	0.08	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
HMAS Creswell STP	Tank	0020_SW037	0020_SW037_220404	04 Apr 2022	ES2212597	0.03	<0.1	<0.02	<0.02	<0.02	0.10	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
HMAS Creswell STP	Tank	0020_SW037	0020_QC202_221011	11 Oct 2022	308190	0.02	<0.02	<0.02	<0.05	<0.01	0.04	<0.01	<0.02	<0.5	<0.1	<0.02	<0.1
HMAS Creswell STP	Tank	0020_SW037	0020_SW037_221011	11 Oct 2022	ES2237104	0.03	<0.1	<0.02	<0.02	<0.02	0.05	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
HMAS Creswell STP	Tank	0020_SW037	0020_SW037_230417	17 Apr 2023	ES2313254	0.03	<0.1	<0.02	<0.02	<0.02	0.06	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
HMAS Creswell STP	Tank	0020_SW037	0020_SW037_240408	08 Apr 2024	ES2411964	0.02	<0.1	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
HMAS Creswell STP	Tank	0020_SW037	0020_SW037_241021	21 Oct 2024	ES2435143	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
HMAS Creswell STP	Tank	0020_SW037	0020_SW037_250331	31 Mar 2025	ES2510618	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
HMAS Creswell STP	Tank	0020_SW037	0020_QC100_251020	20 Oct 2025	ES2533546	<0.02	<0.1	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
HMAS Creswell STP	Tank	0020_SW037	0020_QC200_251020	20 Oct 2025	1285219	0.02 ^{#1}	<0.05	<0.01	<0.01	<0.01	0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05
HMAS Creswell STP	Tank	0020_SW037	0020_SW037_251020	20 Oct 2025	ES2533546	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05

Statistics

Number of Results	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
Number of Detects	9	0	1	0	2	10	1	1	0	0	0	0	0	0	0	0	0
Minimum Concentration	0.02	<0.002	0.0013	<0.0005	0.0079	<0.02	0.0009	0.0069	<0.0005	<0.0005	<0.0005	<0.001	ND	ND	ND	ND	ND
Minimum Detect	0.02	ND	0.0013	ND	0.0079	0.03	0.0009	0.0069	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	0.04	<0.1	<0.02	<0.05	<0.02	0.1	<0.02	<0.02	<0.5	<0.1	<0.02	<0.1	ND	ND	ND	ND	ND
Maximum Detect	0.04	ND	0.0013	ND	0.01	0.1	0.0009	0.0069	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *	0.024	0.038	0.0089	0.011	0.0091	0.045	0.0081	0.0094	0.056	0.015	0.0089	0.027	0.021	0.027	0.0081	0.0082	0.0088
Geometric Average *	0.021	0.027	0.0081	0.0082	0.0088	0.035	0.0071	0.0092	0.022	0.0091	0.0071	0.021	0.021	0.021	0.021	0.021	0.021
Median Concentration *	0.02	0.05	0.01	0.01	0.01	0.04	0.01	0.01	0.025	0.01	0.01	0.025	0.025	0.025	0.025	0.025	0.025
Standard Deviation *	0.012	0.019	0.0027	0.0068	0.0019	0.028	0.0031	0.0016	0.086	0.016	0.0029	0.012	0.012	0.012	0.012	0.012	0.012
Geometric Standard Deviation *	1.7	3.2	1.8	3.1	1.3	2.2	2	1.2	5.4	3.5	2.8	3.1	3.1	3.1	3.1	3.1	3.1
95% UCL (Student's-t) *	0.0294	0.0476	0.0103	0.0145	0.01	0.0583	0.00966	0.0102	0.0989	0.0228	0.0103	0.033	0.033	0.033	0.033	0.033	0.033
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	8	0	15	77	8	8	0	0	0	0	0	0	0	0	0
% of Non-Detects	31	100	92	100	85	23	92	92	100	100	100	100	100	100	100	100	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

* 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.



Appendix B
Table B5h
Historical Water Analytical Results - HMAS Creswell STP

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Sulfonamide						PFAS - Fluorotelomer Sulfonic Acids			
	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
EQL	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001

Catchment	SPR	Location	Field ID	Date	Lab Report No.										
HMAS Creswell STP	Tank	0020_SW037	G_SW03	12 Apr 2017	ES1709064	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.0019	<0.001	0.002	<0.001	<0.001
HMAS Creswell STP	Tank	0020_SW037	0020_QC202_211018	18 Oct 2021	281319	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
HMAS Creswell STP	Tank	0020_SW037	0020_SW037_211018	18 Oct 2021	ES2138638	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
HMAS Creswell STP	Tank	0020_SW037	0020_SW037_220404	04 Apr 2022	ES2212597	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
HMAS Creswell STP	Tank	0020_SW037	0020_QC202_221011	11 Oct 2022	308190	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
HMAS Creswell STP	Tank	0020_SW037	0020_SW037_221011	11 Oct 2022	ES2237104	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
HMAS Creswell STP	Tank	0020_SW037	0020_SW037_230417	17 Apr 2023	ES2313254	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
HMAS Creswell STP	Tank	0020_SW037	0020_SW037_240408	08 Apr 2024	ES2411964	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
HMAS Creswell STP	Tank	0020_SW037	0020_SW037_241021	21 Oct 2024	ES2435143	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
HMAS Creswell STP	Tank	0020_SW037	0020_SW037_250331	31 Mar 2025	ES2510618	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
HMAS Creswell STP	Tank	0020_SW037	0020_QC100_251020	20 Oct 2025	ES2533546	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
HMAS Creswell STP	Tank	0020_SW037	0020_QC200_251020	20 Oct 2025	1285219	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
HMAS Creswell STP	Tank	0020_SW037	0020_SW037_251020	20 Oct 2025	ES2533546	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05

Statistics										
Number of Results	13	13	13	13	13	13	13	13	13	13
Number of Detects	0	0	0	0	0	1	0	1	0	0
Minimum Concentration	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.0019	<0.001	0.002	<0.001	<0.001
Minimum Detect	ND	ND	ND	ND	ND	0.0019	ND	0.002	ND	ND
Maximum Concentration	<0.05	<0.5	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05
Maximum Detect	ND	ND	ND	ND	ND	0.0019	ND	0.002	ND	ND
Average Concentration *	0.01	0.058	0.023	0.01	0.023	0.017	0.018	0.02	0.019	0.019
Geometric Average *	0.0081	0.026	0.019	0.0081	0.019	0.012	0.013	0.016	0.014	0.014
Median Concentration *	0.01	0.025	0.025	0.01	0.025	0.01	0.025	0.025	0.025	0.025
Standard Deviation *	0.0051	0.086	0.0068	0.0051	0.0068	0.016	0.01	0.0092	0.0092	0.0092
Geometric Standard Deviation *	2.9	4.3	3	2.9	3	2.3	3.3	2.4	3.1	3.1
95% UCL (Student's-t) *	0.0129	0.1	0.0265	0.0129	0.0265	0.0244	0.0235	0.0247	0.0238	0.0238
Number of Env Standard Exceedances	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
% of Detects	0	0	0	0	0	8	0	8	0	0
% of Non-Detects	100	100	100	100	100	92	100	92	100	100
% of Detects at or above Env Standards	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

* 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.



Appendix B
Table B5i
Historical Water Analytical Results - Summercloud Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids				
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Sum of US EPA PFAS (PFOS + PFOA)*	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPrS)
	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	0.0003	0.0005	0.0005	0.0003	0.0003	0.0003	0.01	0.01	0.0005	0.0005	0.01	0.0005	0.01
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13		220										
PFAS NEMP 3.0 2025 Recreational water quality	2	2	10		2								

Catchment	SPR	Location	Field ID	Date	Lab Report No.													
Summercloud Creek	Pathway	0021_MW022	MW022	04 May 2017	ES1711220	1.21	1.55	0.105	3.36	2.76	3.06	-	-	0.049	<0.0005	-	0.156	-
Summercloud Creek	Pathway	0021_MW022	0021_MW022_211020	20 Oct 2021	ES2138639	0.69	0.92	0.04	1.83	1.61	1.72	-	-	<0.02	<0.02	-	0.07	-
Summercloud Creek	Pathway	0021_MW022	0021_MW022_211221	21 Dec 2021	ES2147061	0.72	1.04	0.06	2.07	1.76	1.94	-	-	<0.02	<0.02	-	0.09	-
Summercloud Creek	Pathway	0021_MW022	0021_MW022_220407	07 Apr 2022	ES2212442	0.69	0.90	0.06	1.89	1.59	1.76	-	-	0.02	<0.02	-	0.08	-
Summercloud Creek	Pathway	0021_MW022	0021_QC110_220407	07 Apr 2022	ES2212442	0.62	0.88	0.04	1.75	1.50	1.63	-	-	<0.02	<0.02	-	0.08	-
Summercloud Creek	Pathway	0021_MW022	0021_MW022_221012	12 Oct 2022	ES2237106	1.32	1.05	0.09	2.79	2.37	2.64	-	-	<0.02	<0.02	-	0.11	-
Summercloud Creek	Pathway	0021_MW022	0021_QC208_221012	12 Oct 2022	308187	1.1	1.0	0.1	2.5	2.1	-	1.2	-	0.01	<0.02	-	0.11	-
Summercloud Creek	Pathway	0021_MW022	0021_MW022_230417	17 Apr 2023	ES2313364	1.95	1.50	0.12	4.02	3.45	3.80	-	-	<0.02	<0.02	-	0.16	-
Summercloud Creek	Pathway	0021_MW022	0021_MW022_231016	16 Oct 2023	ES2336398	1.18	0.84	0.07	2.31	2.02	2.20	-	-	<0.02	<0.02	-	0.08	-
Summercloud Creek	Pathway	0021_MW022	0021_MW022_240408	08 Apr 2024	ES2411994	0.82	0.71	0.04	1.70	1.53	1.62	-	-	<0.02	<0.02	-	0.06	-
Summercloud Creek	Pathway	0021_MW022	0021_QC101_240408	08 Apr 2024	ES2411994	0.86	0.74	0.05	1.79	1.60	1.70	-	-	<0.02	<0.02	-	0.06	-
Summercloud Creek	Pathway	0021_MW022	0021_QC201_240408	08 Apr 2024	348825	0.66	0.67	0.04	1.5	1.3	-	0.70	-	<0.01	<0.02	-	0.05	-
Summercloud Creek	Pathway	0021_MW022	0021_MW022_241024	24 Oct 2024	ES2435541	0.70	0.64	0.04	1.52	1.34	1.43	-	-	<0.02	<0.02	-	0.06	-
Summercloud Creek	Pathway	0021_MW022	0021_MW022_250401	01 Apr 2025	ES2510113	0.72	0.73	0.04	1.62	1.45	1.53	-	-	<0.02	<0.02	-	0.06	-
Summercloud Creek	Pathway	0021_MW022	0021_MW022_251023	23 Oct 2025	ES2533521	0.65	0.59	0.04	1.41	1.24	1.32	-	-	<0.02	<0.02	-	0.06	-
Summercloud Creek	Pathway	0021_MW131	MC_MW02_180411	11 Apr 2018	ES1810721	0.0151	0.0181	<0.0005	0.0378	0.0332	0.0345	-	-	0.0013	<0.0005	-	0.0012	-
Summercloud Creek	Pathway	0021_MW131	MC_MW02_180502	02 May 2018	ES1812871	<0.05 ^{#1}	<0.05 ^{#1}	<0.05 ^{#1}	<0.05 ^{#1}	<0.05 ^{#1}	<0.05 ^{#1}	-	-	<0.05 ^{#1}	<0.05 ^{#1}	-	<0.05 ^{#1}	-
Summercloud Creek	Pathway	0021_MW131	0021_MW131_231017	18 Oct 2023	ES2336398	0.10	0.08	<0.01	0.20	0.18	0.20	-	-	<0.02	<0.02	-	<0.02	-
Summercloud Creek	Pathway	0021_MW131	0021_MW131_240409	09 Apr 2024	ES2411994	0.07	0.12	<0.01	0.19	0.19	0.19	-	-	<0.02	<0.02	-	<0.02	-
Summercloud Creek	Pathway	0021_MW131	0021_MW131_241023	23 Oct 2024	ES2435078	0.14	0.15	<0.01	0.31	0.29	0.31	-	-	<0.02	<0.02	-	<0.02	-
Summercloud Creek	Pathway	0021_MW131	0021_MW131_250401	01 Apr 2025	ES2510113	0.05	0.04	<0.01	0.09	0.09	0.09	-	-	<0.02	<0.02	-	<0.02	-
Summercloud Creek	Pathway	0021_MW131	0021_QC134_250401	01 Apr 2025	ES2510113	0.16	0.16	0.02	0.34	0.32	0.34	-	-	<0.02	<0.02	-	<0.02	-
Summercloud Creek	Pathway	0021_MW131	0021_QC234_250401	01 Apr 2025	1210052	0.05	0.04	<0.01	0.1	0.09	0.1	0.05	0.09	<0.01	<0.01	<0.01	<0.01	<0.01
Summercloud Creek	Pathway	0021_MW131	0021_MW131_251021	21 Oct 2025	ES2533521	0.05	0.08	<0.01	0.13	0.13	0.13	-	-	<0.02	<0.02	-	<0.02	-
Summercloud Creek	Pathway	0021_MW132	MC_MW03_180411	11 Apr 2018	ES1810721	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	<0.0003	-	-	<0.0005	<0.0005	-	<0.0005	-
Summercloud Creek	Pathway	0021_MW132	0021_MW132_221012	12 Oct 2022	ES2237106	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Summercloud Creek	Pathway	0021_MW132	0021_QC203_221012	12 Oct 2022	308187	<0.01	<0.01	<0.01	0.01	<0.01	-	<0.01	-	<0.01	<0.02	-	<0.01	-
Summercloud Creek	Pathway	0021_MW132	0021_MW132_230418	18 Apr 2023	ES2313364	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Summercloud Creek	Pathway	0021_MW132	0021_MW132_231017	17 Oct 2023	ES2336398	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Summercloud Creek	Pathway	0021_MW132	0021_QC104_231017	17 Oct 2023	ES2336399	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Summercloud Creek	Pathway	0021_MW132	0021_QC204_231017	17 Oct 2023	335876	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.01	<0.02	-	<0.01	-
Summercloud Creek	Pathway	0021_MW132	0021_MW132_240409	09 Apr 2024	ES2411994	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Summercloud Creek	Pathway	0021_MW132	0021_MW132_241023	23 Oct 2024	ES2435078	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Summercloud Creek	Pathway	0021_MW132	0021_MW132_250401	01 Apr 2025	ES2510113	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Summercloud Creek	Pathway	0021_MW132	0021_MW132_251021	21 Oct 2025	ES2533521	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Summercloud Creek	Pathway	0021_SW057	SC_QC106_180323	23 Mar 2018	ES1809241	0.0007	<0.0005	<0.0005	0.0007	0.0007	0.0007	-	-	<0.0005	<0.0005	-	<0.0005	-
Summercloud Creek	Pathway	0021_SW057	SC_SW02_180323	23 Mar 2018	ES1809241	0.0008	<0.0005	<0.0005	0.0008	0.0008	0.0008	-	-	<0.0005	<0.0005	-	<0.0005	-
Summercloud Creek	Pathway	0021_SW057	0021_SW057_221012	12 Oct 2022	ES2237106	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Summercloud Creek	Pathway	0021_SW057	0021_SW057_230418	18 Apr 2023	ES2313364	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Summercloud Creek	Pathway	0021_SW057	0021_SW057_231017	17 Oct 2023	ES2336399	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Summercloud Creek	Pathway	0021_SW057	0021_SW057_240409	09 Apr 2024	ES2412012	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Summercloud Creek	Pathway	0021_SW057	0021_SW057_241023	23 Oct 2024	ES2435078	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Summercloud Creek	Pathway	0021_SW057	0021_SW057_250401	01 Apr 2025	ES2510622	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Summercloud Creek	Pathway	0021_SW057	0021_SW057_251021	21 Oct 2025	ES2533538	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Summercloud Creek	Pathway	0021_SW058	SC_SW03_180323	23 Mar 2018	ES1809241	0.0005	<0.0005	<0.0005	0.0005	0.0005	0.0005	-	-	<0.0005	<0.0005	-	<0.0005	-



Appendix B
Table B5i
Historical Water Analytical Results - Summercloud Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids				
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Sum of US EPA PFAS (PFOS + PFOA)*	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPrS)
	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	0.0003	0.0005	0.0005	0.0003	0.0003	0.0003	0.01	0.01	0.0005	0.0005	0.01	0.0005	0.01
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13		220										
PFAS NEMP 3.0 2025 Recreational water quality	2	2	10		2								

Catchment	SPR	Location	Field ID	Date	Lab Report No.													
Summercloud Creek	Pathway	0021_SW058	0021_SW058_221012	12 Oct 2022	ES2237106	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Summercloud Creek	Pathway	0021_SW058	0021_SW058_230418	18 Apr 2023	ES2313364	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Summercloud Creek	Pathway	0021_SW058	0021_SW058_231017	17 Oct 2023	ES2336399	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Summercloud Creek	Pathway	0021_SW058	0021_SW058_240409	09 Apr 2024	ES2412012	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Summercloud Creek	Pathway	0021_SW058	0021_SW058_241024	24 Oct 2024	ES2435541	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Summercloud Creek	Pathway	0021_SW058	0021_SW058_250401	01 Apr 2025	ES2510622	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Summercloud Creek	Pathway	0021_SW058	0021_QC161_251021	21 Oct 2025	ES2533538	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Summercloud Creek	Pathway	0021_SW058	0021_QC261_251021	21 Oct 2025	1285374	<0.01	<0.01	<0.01	<0.1	<0.01	<0.05	-	-	<0.01	<0.01	<0.01	<0.01	<0.01
Summercloud Creek	Pathway	0021_SW058	0021_SW058_251021	21 Oct 2025	ES2533538	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Summercloud Creek	Receptor	0021_SW056	SC_SW01_180323	23 Mar 2018	ES1809241	0.0043	0.0012	<0.0005	0.0055	0.0055	0.0055	-	-	<0.0005	<0.0005	-	<0.0005	-
Summercloud Creek	Receptor	0021_SW056	0021_SW056_221012	12 Oct 2022	ES2237106	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Summercloud Creek	Receptor	0021_SW056	0021_SW056_230418	18 Apr 2023	ES2313364	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Summercloud Creek	Receptor	0021_SW056	0021_SW056_231017	17 Oct 2023	ES2336399	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Summercloud Creek	Receptor	0021_SW056	0021_SW056_240409	09 Apr 2024	ES2412012	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Summercloud Creek	Receptor	0021_SW056	0021_QC255_241023	23 Oct 2024	1154751	<0.01	<0.01	<0.01	<0.1	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Summercloud Creek	Receptor	0021_SW056	0021_SW056_241023	23 Oct 2024	ES2435078	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Summercloud Creek	Receptor	0021_SW056	0021_SW056_250129	29 Jan 2025	ES2503552	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	<0.02	<0.02	<0.02
Summercloud Creek	Receptor	0021_SW056	0021_SW056_250401	01 Apr 2025	ES2510622	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Summercloud Creek	Receptor	0021_SW056	0021_SW056_251021	21 Oct 2025	ES2533538	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Summercloud Creek	Receptor	0021_SW188	0021_SW188_221221	21 Dec 2022	EW2205954	<0.01	0.03	<0.01	0.03	0.03	0.03	-	-	<0.02	<0.02	-	<0.02	-
Summercloud Creek	Receptor	0021_SW188	0021_SW188_241024	24 Oct 2024	ES2435541	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Summercloud Creek	Receptor	0021_SW188	0021_SW188_250403	03 Apr 2025	ES2510623	<0.01	0.01	<0.01	0.01	0.01	0.01	-	-	<0.02	<0.02	-	<0.02	-
Summercloud Creek	Receptor	0021_SW188	0021_QC162_251021	21 Oct 2025	ES2533538	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-
Summercloud Creek	Receptor	0021_SW188	0021_QC262_251021	21 Oct 2025	1285374	<0.01	0.01 ^{#2}	0.01 ^{#2}	0.1	0.01	0.1	-	-	<0.01	<0.01	<0.01	<0.01	<0.01
Summercloud Creek	Receptor	0021_SW188	0021_SW188_251021	21 Oct 2025	ES2533538	<0.01	0.01	<0.01	0.01	0.01	0.01	-	-	<0.02	<0.02	-	<0.02	-

Statistics														
Number of Results	70	70	70	70	70	66	6	2	70	70	5	70	5	
Number of Detects	27	28	17	32	31	29	3	1	4	0	0	16	0	
Minimum Concentration	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	<0.0003	<0.01	<0.01	<0.0005	<0.0005	<0.01	<0.0005	<0.01	
Minimum Detect	0.0005	0.0012	0.01	0.0005	0.0005	0.0005	0.05	0.09	0.0013	ND	ND	0.0012	ND	
Maximum Concentration	1.95	1.55	0.12	4.02	3.45	3.8	1.2	0.09	<0.05	<0.05	<0.02	0.16	<0.02	
Maximum Detect	1.95	1.55	0.12	4.02	3.45	3.8	1.2	0.09	0.049	ND	ND	0.16	ND	
Average Concentration *	0.21	0.21	0.017	0.48	0.42	0.43	0.33	0.048	0.0096	0.009	0.006	0.025	0.006	
Geometric Average *	0.018	0.018	0.0069	0.028	0.024	0.025	0.042	0.021	0.0073	0.0067	0.0057	0.011	0.0057	
Median Concentration *	0.005	0.005	0.005	0.005	0.005	0.005	0.0275	0.0475	0.01	0.01	0.005	0.01	0.005	
Standard Deviation *	0.41	0.39	0.027	0.93	0.8	0.86	0.51	0.06	0.0061	0.0036	0.0022	0.036	0.0022	
Geometric Standard Deviation *	10	11	4.2	14	13	13	13	7.7	2.8	3.1	1.4	4.2	1.4	
95% UCL (Student's-t) *	0.293	0.289	0.0228	0.671	0.577	0.603	0.745	0.316	0.0108	0.00968	0.00813	0.0323	0.00813	
Number of Env Standard Exceedances	17	0	0	0	5	0	0	0	0	0	0	0	0	
Number of Env Standard Exceedances (Detects Only)	17	0	0	0	5	0	0	0	0	0	0	0	0	
% of Detects	39	40	24	46	44	44	50	50	6	0	0	23	0	
% of Non-Detects	61	60	76	54	56	56	50	50	94	100	100	77	100	
% of Detects at or above Env Standards	24	0	0	0	7	0	0	0	0	0	0	0	0	
% of Results Below Env Standards or Non-Detect	76	100	100	100	93	100	100	100	100	100	100	100	100	

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Reported Analyte LOR is higher than Requested Analyte LOR

#2 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.



Appendix B
Table B5i
Historical Water Analytical Results - Summercloud Creek

	PFAS - Perfluoroalkyl Carboxylic Acids											
	Perfluoropentane sulfonic acid (PFPeS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluoro-n-hexadecanoic acid (PFHxDA)
	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	0.0005	0.002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.05
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%												
PFAS NEMP 3.0 2025 Recreational water quality												

Catchment	SPR	Location	Field ID	Date	Lab Report No.												
Summercloud Creek	Pathway	0021_MW022	MW022	04 May 2017	ES1711220	0.145	<0.002	<0.0005	<0.0005	0.0167	0.102	<0.0005	0.0252	<0.0005	<0.0005	<0.0005	-
Summercloud Creek	Pathway	0021_MW022	0021_MW022_211020	20 Oct 2021	ES2138639	0.04	<0.1	<0.02	<0.02	<0.02	0.07	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Pathway	0021_MW022	0021_MW022_211221	21 Dec 2021	ES2147061	0.04	<0.1	<0.02	<0.02	<0.02	0.10	<0.02	0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Pathway	0021_MW022	0021_MW022_220407	07 Apr 2022	ES2212442	0.05	<0.1	<0.02	<0.02	<0.02	0.09	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Pathway	0021_MW022	0021_QC110_220407	07 Apr 2022	ES2212442	0.04	<0.1	<0.02	<0.02	<0.02	0.09	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Pathway	0021_MW022	0021_MW022_221012	12 Oct 2022	ES2237106	0.04	<0.1	<0.02	<0.02	0.03	0.12	<0.02	0.03	<0.05	<0.02	<0.02	-
Summercloud Creek	Pathway	0021_MW022	0021_QC208_221012	12 Oct 2022	308187	0.05	<0.02	<0.02	<0.05	0.03	0.12	<0.01	0.02	<0.5	<0.1	<0.02	-
Summercloud Creek	Pathway	0021_MW022	0021_MW022_230417	17 Apr 2023	ES2313364	0.06	<0.1	<0.02	<0.02	0.03	0.16	<0.02	0.04	<0.05	<0.02	<0.02	-
Summercloud Creek	Pathway	0021_MW022	0021_MW022_231016	16 Oct 2023	ES2336398	0.03	<0.1	<0.02	<0.02	<0.02	0.09	<0.02	0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Pathway	0021_MW022	0021_MW022_240408	08 Apr 2024	ES2411994	0.02	<0.1	<0.02	<0.02	<0.02	0.05	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Pathway	0021_MW022	0021_QC101_240408	08 Apr 2024	ES2411994	0.03	<0.1	<0.02	<0.02	<0.02	0.05	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Pathway	0021_MW022	0021_QC201_240408	08 Apr 2024	348825	0.02	<0.02	<0.02	<0.05	0.01	0.06	<0.01	<0.02	<0.5	<0.1	<0.02	-
Summercloud Creek	Pathway	0021_MW022	0021_MW022_241024	24 Oct 2024	ES2435541	0.03	<0.1	<0.02	<0.02	<0.02	0.05	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Pathway	0021_MW022	0021_MW022_250401	01 Apr 2025	ES2510113	0.03	<0.1	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Pathway	0021_MW022	0021_MW022_251023	23 Oct 2025	ES2533521	0.03	<0.1	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Pathway	0021_MW131	MC_MW02_180411	11 Apr 2018	ES1810721	0.0021	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-
Summercloud Creek	Pathway	0021_MW131	MC_MW02_180502	02 May 2018	ES1812871	<0.05 ^{#1}	<0.2 ^{#1}	<0.05 ^{#1}	<0.05 ^{#1}	<0.05 ^{#1}	<0.05 ^{#1}	<0.05 ^{#1}	<0.05 ^{#1}	<0.12 ^{#1}	<0.05 ^{#1}	<0.05 ^{#1}	-
Summercloud Creek	Pathway	0021_MW131	0021_MW131_231017	18 Oct 2023	ES2336398	<0.02	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Pathway	0021_MW131	0021_MW131_240409	09 Apr 2024	ES2411994	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Pathway	0021_MW131	0021_MW131_241023	23 Oct 2024	ES2435078	<0.02	<0.1	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Pathway	0021_MW131	0021_MW131_250401	01 Apr 2025	ES2510113	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Pathway	0021_MW131	0021_QC134_250401	01 Apr 2025	ES2510113	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Pathway	0021_MW131	0021_QC234_250401	01 Apr 2025	1210052	<0.01	<0.05	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-
Summercloud Creek	Pathway	0021_MW131	0021_MW131_251021	21 Oct 2025	ES2533521	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Pathway	0021_MW132	MC_MW03_180411	11 Apr 2018	ES1810721	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-
Summercloud Creek	Pathway	0021_MW132	0021_MW132_221012	12 Oct 2022	ES2237106	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Pathway	0021_MW132	0021_QC203_221012	12 Oct 2022	308187	<0.01	<0.02	<0.02	<0.05	<0.01	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02	-
Summercloud Creek	Pathway	0021_MW132	0021_MW132_230418	18 Apr 2023	ES2313364	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Pathway	0021_MW132	0021_MW132_231017	17 Oct 2023	ES2336398	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Pathway	0021_MW132	0021_QC104_231017	17 Oct 2023	ES2336399	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Pathway	0021_MW132	0021_QC204_231017	17 Oct 2023	335876	<0.01	<0.02	<0.02	<0.05	<0.01	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02	-
Summercloud Creek	Pathway	0021_MW132	0021_MW132_240409	09 Apr 2024	ES2411994	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Pathway	0021_MW132	0021_MW132_241023	23 Oct 2024	ES2435078	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Pathway	0021_MW132	0021_MW132_250401	01 Apr 2025	ES2510113	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Pathway	0021_MW132	0021_MW132_251021	21 Oct 2025	ES2533521	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Pathway	0021_SW057	SC_QC106_180323	23 Mar 2018	ES1809241	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-
Summercloud Creek	Pathway	0021_SW057	SC_SW02_180323	23 Mar 2018	ES1809241	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-
Summercloud Creek	Pathway	0021_SW057	0021_SW057_221012	12 Oct 2022	ES2237106	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Pathway	0021_SW057	0021_SW057_230418	18 Apr 2023	ES2313364	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Pathway	0021_SW057	0021_SW057_231017	17 Oct 2023	ES2336399	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Pathway	0021_SW057	0021_SW057_240409	09 Apr 2024	ES2412012	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Pathway	0021_SW057	0021_SW057_241023	23 Oct 2024	ES2435078	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Pathway	0021_SW057	0021_SW057_250401	01 Apr 2025	ES2510622	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Pathway	0021_SW057	0021_SW057_251021	21 Oct 2025	ES2533538	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Pathway	0021_SW058	SC_SW03_180323	23 Mar 2018	ES1809241	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-



Appendix B
Table B5i
Historical Water Analytical Results - Summercloud Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Carboxylic Acids											
	Perfluoropentane sulfonic acid (PFPeS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnDA)	Perfluoro-n-hexadecanoic acid (PFHxDA)
	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	0.0005	0.002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.05
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%												
PFAS NEMP 3.0 2025 Recreational water quality												

Catchment	SPR	Location	Field ID	Date	Lab Report No.												
Summercloud Creek	Pathway	0021_SW058	0021_SW058_221012	12 Oct 2022	ES2237106	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Pathway	0021_SW058	0021_SW058_230418	18 Apr 2023	ES2313364	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Pathway	0021_SW058	0021_SW058_231017	17 Oct 2023	ES2336399	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Pathway	0021_SW058	0021_SW058_240409	09 Apr 2024	ES2412012	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Pathway	0021_SW058	0021_SW058_241024	24 Oct 2024	ES2435541	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Pathway	0021_SW058	0021_SW058_250401	01 Apr 2025	ES2510622	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Pathway	0021_SW058	0021_QC161_251021	21 Oct 2025	ES2533538	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Pathway	0021_SW058	0021_QC261_251021	21 Oct 2025	1285374	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-
Summercloud Creek	Pathway	0021_SW058	0021_SW058_251021	21 Oct 2025	ES2533538	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Receptor	0021_SW056	SC_SW01_180323	23 Mar 2018	ES1809241	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-
Summercloud Creek	Receptor	0021_SW056	0021_SW056_221012	12 Oct 2022	ES2237106	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Receptor	0021_SW056	0021_SW056_230418	18 Apr 2023	ES2313364	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Receptor	0021_SW056	0021_SW056_231017	17 Oct 2023	ES2336399	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Receptor	0021_SW056	0021_SW056_240409	09 Apr 2024	ES2412012	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Receptor	0021_SW056	0021_QC255_241023	23 Oct 2024	1154751	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-
Summercloud Creek	Receptor	0021_SW056	0021_SW056_241023	23 Oct 2024	ES2435078	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Receptor	0021_SW056	0021_SW056_250129	29 Jan 2025	ES2503552	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05
Summercloud Creek	Receptor	0021_SW056	0021_SW056_250401	01 Apr 2025	ES2510622	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Receptor	0021_SW056	0021_SW056_251021	21 Oct 2025	ES2533538	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Receptor	0021_SW188	0021_SW188_221221	21 Dec 2022	EW2205954	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Receptor	0021_SW188	0021_SW188_241024	24 Oct 2024	ES2435541	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Receptor	0021_SW188	0021_SW188_250403	03 Apr 2025	ES2510623	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Receptor	0021_SW188	0021_QC162_251021	21 Oct 2025	ES2533538	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-
Summercloud Creek	Receptor	0021_SW188	0021_QC262_251021	21 Oct 2025	1285374	<0.01	<0.05	<0.01	<0.01	<0.01	0.06	<0.01	0.02	<0.01	<0.01	<0.01	-
Summercloud Creek	Receptor	0021_SW188	0021_SW188_251021	21 Oct 2025	ES2533538	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	-

Statistics																	
Number of Results	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	1	
Number of Detects	16	0	0	0	5	19	0	7	0	7	0	0	0	0	0	0	
Minimum Concentration	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.05	
Minimum Detect	0.0021	ND	ND	ND	0.01	0.01	ND	0.02	ND	ND	ND	ND	ND	ND	ND	ND	
Maximum Concentration	0.145	<0.2	<0.05	<0.05	<0.05	0.16	<0.05	<0.05	<0.5	<0.1	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	
Maximum Detect	0.145	ND	ND	ND	0.03	0.16	ND	0.04	ND	ND	ND	ND	ND	ND	ND	ND	
Average Concentration *	0.016	0.042	0.009	0.0098	0.0099	0.026	0.0087	0.011	0.035	0.011	0.009	0.009	0.009	0.009	0.009	0.009	
Geometric Average *	0.0096	0.03	0.0067	0.0071	0.0073	0.011	0.0065	0.0078	0.017	0.0074	0.0067	0.0067	0.0067	0.0067	0.0067	0.025	
Median Concentration *	0.01	0.05	0.01	0.01	0.01	0.01	0.01	0.01	0.025	0.01	0.01	0.01	0.01	0.01	0.01	0.025	
Standard Deviation *	0.02	0.019	0.0036	0.0052	0.0056	0.034	0.0037	0.0063	0.054	0.01	0.0036	0.0036	0.0036	0.0036	0.0036	0.0036	
Geometric Standard Deviation *	3.4	3.4	3.1	3.2	3	4.4	3.1	3	4.8	3.4	3.1	3.1	3.1	3.1	3.1	3.1	
95% UCL (Student's-t) *	0.0202	0.0458	0.00968	0.0109	0.011	0.0324	0.00941	0.0119	0.0455	0.0133	0.00968	0.00968	0.00968	0.00968	0.00968	0.00968	
Number of Env Standard Exceedances	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	
% of Detects	23	0	0	0	7	27	0	10	0	0	0	0	0	0	0	0	
% of Non-Detects	77	100	100	100	93	73	100	90	100	100	100	100	100	100	100	100	
% of Detects at or above Env Standards	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	

* A Non Detect Multiplier of 0.5 has been applied.

Comments
#1 Reported Analyte LOR is higher than Requested Analyte LOR
#2 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.



Appendix B
Table B5i
Historical Water Analytical Results - Summercloud Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
	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
EQL	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%											
PFAS NEMP 3.0 2025 Recreational water quality											

Catchment	SPR	Location	Field ID	Date	Lab Report No.											
Summercloud Creek	Pathway	0021_MW022	MW022	04 May 2017	ES1711220	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Summercloud Creek	Pathway	0021_MW022	0021_MW022_211020	20 Oct 2021	ES2138639	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_MW022	0021_MW022_211221	21 Dec 2021	ES2147061	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_MW022	0021_MW022_220407	07 Apr 2022	ES2212442	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_MW022	0021_QC110_220407	07 Apr 2022	ES2212442	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_MW022	0021_MW022_221012	12 Oct 2022	ES2237106	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_MW022	0021_QC208_221012	12 Oct 2022	308187	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Summercloud Creek	Pathway	0021_MW022	0021_MW022_230417	17 Apr 2023	ES2313364	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_MW022	0021_MW022_231016	16 Oct 2023	ES2336398	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_MW022	0021_MW022_240408	08 Apr 2024	ES2411994	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_MW022	0021_QC101_240408	08 Apr 2024	ES2411994	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_MW022	0021_QC201_240408	08 Apr 2024	348825	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Summercloud Creek	Pathway	0021_MW022	0021_MW022_241024	24 Oct 2024	ES2435541	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_MW022	0021_MW022_250401	01 Apr 2025	ES2510113	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_MW022	0021_MW022_251023	23 Oct 2025	ES2533521	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_MW131	MC_MW02_180411	11 Apr 2018	ES1810721	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Summercloud Creek	Pathway	0021_MW131	MC_MW02_180502	02 May 2018	ES1812871	<0.12 ^{#1}	<0.05 ^{#1}	<0.12 ^{#1}	<0.12 ^{#1}	<0.05 ^{#1}	<0.12 ^{#1}	<0.05 ^{#1}	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_MW131	0021_MW131_231017	18 Oct 2023	ES2336398	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_MW131	0021_MW131_240409	09 Apr 2024	ES2411994	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_MW131	0021_MW131_241023	23 Oct 2024	ES2435078	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_MW131	0021_MW131_250401	01 Apr 2025	ES2510113	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_MW131	0021_QC134_250401	01 Apr 2025	ES2510113	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_MW131	0021_QC234_250401	01 Apr 2025	1210052	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Summercloud Creek	Pathway	0021_MW131	0021_MW131_251021	21 Oct 2025	ES2533521	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_MW132	MC_MW03_180411	11 Apr 2018	ES1810721	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Summercloud Creek	Pathway	0021_MW132	0021_MW132_221012	12 Oct 2022	ES2237106	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_MW132	0021_QC203_221012	12 Oct 2022	308187	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	0.01	<0.02	<0.02
Summercloud Creek	Pathway	0021_MW132	0021_MW132_230418	18 Apr 2023	ES2313364	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_MW132	0021_MW132_231017	17 Oct 2023	ES2336398	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_MW132	0021_QC104_231017	17 Oct 2023	ES2336399	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_MW132	0021_QC204_231017	17 Oct 2023	335876	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Summercloud Creek	Pathway	0021_MW132	0021_MW132_240409	09 Apr 2024	ES2411994	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_MW132	0021_MW132_241023	23 Oct 2024	ES2435078	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_MW132	0021_MW132_250401	01 Apr 2025	ES2510113	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_MW132	0021_MW132_251021	21 Oct 2025	ES2533521	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_SW057	SC_QC106_180323	23 Mar 2018	ES1809241	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Summercloud Creek	Pathway	0021_SW057	SC_SW02_180323	23 Mar 2018	ES1809241	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Summercloud Creek	Pathway	0021_SW057	0021_SW057_221012	12 Oct 2022	ES2237106	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_SW057	0021_SW057_230418	18 Apr 2023	ES2313364	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_SW057	0021_SW057_231017	17 Oct 2023	ES2336399	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_SW057	0021_SW057_240409	09 Apr 2024	ES2412012	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_SW057	0021_SW057_241023	23 Oct 2024	ES2435078	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_SW057	0021_SW057_250401	01 Apr 2025	ES2510622	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_SW057	0021_SW057_251021	21 Oct 2025	ES2533538	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_SW058	SC_SW03_180323	23 Mar 2018	ES1809241	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001



Appendix B
Table B5i
Historical Water Analytical Results - Summercloud Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
	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
EQL	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%											
PFAS NEMP 3.0 2025 Recreational water quality											

Catchment	SPR	Location	Field ID	Date	Lab Report No.											
Summercloud Creek	Pathway	0021_SW058	0021_SW058_221012	12 Oct 2022	ES2237106	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_SW058	0021_SW058_230418	18 Apr 2023	ES2313364	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_SW058	0021_SW058_231017	17 Oct 2023	ES2336399	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_SW058	0021_SW058_240409	09 Apr 2024	ES2412012	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_SW058	0021_SW058_241024	24 Oct 2024	ES2435541	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_SW058	0021_SW058_250401	01 Apr 2025	ES2510622	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_SW058	0021_QC161_251021	21 Oct 2025	ES2533538	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Pathway	0021_SW058	0021_QC261_251021	21 Oct 2025	1285374	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Summercloud Creek	Pathway	0021_SW058	0021_SW058_251021	21 Oct 2025	ES2533538	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Receptor	0021_SW056	SC_SW01_180323	23 Mar 2018	ES1809241	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Summercloud Creek	Receptor	0021_SW056	0021_SW056_221012	12 Oct 2022	ES2237106	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Receptor	0021_SW056	0021_SW056_230418	18 Apr 2023	ES2313364	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Receptor	0021_SW056	0021_SW056_231017	17 Oct 2023	ES2336399	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Receptor	0021_SW056	0021_SW056_240409	09 Apr 2024	ES2412012	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Receptor	0021_SW056	0021_QC255_241023	23 Oct 2024	1154751	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Summercloud Creek	Receptor	0021_SW056	0021_SW056_241023	23 Oct 2024	ES2435078	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Receptor	0021_SW056	0021_SW056_250129	29 Jan 2025	ES2503552	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Receptor	0021_SW056	0021_SW056_250401	01 Apr 2025	ES2510622	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Receptor	0021_SW056	0021_SW056_251021	21 Oct 2025	ES2533538	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Receptor	0021_SW188	0021_SW188_221221	21 Dec 2022	EW2205954	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Receptor	0021_SW188	0021_SW188_241024	24 Oct 2024	ES2435541	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Receptor	0021_SW188	0021_SW188_250403	03 Apr 2025	ES2510623	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Receptor	0021_SW188	0021_QC162_251021	21 Oct 2025	ES2533538	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Summercloud Creek	Receptor	0021_SW188	0021_QC262_251021	21 Oct 2025	1285374	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Summercloud Creek	Receptor	0021_SW188	0021_SW188_251021	21 Oct 2025	ES2533538	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05

Statistics												
Number of Results	70	70	70	70	70	70	70	70	70	70	70	70
Number of Detects	0	0	0	0	0	0	0	0	0	1	0	0
Minimum Concentration	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.01	ND	ND
Maximum Concentration	<0.12	<0.05	<0.5	<0.12	<0.05	<0.12	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.01	ND	ND
Average Concentration *	0.024	0.01	0.036	0.023	0.01	0.023	0.012	0.02	0.021	0.021	0.021	0.021
Geometric Average *	0.018	0.0074	0.02	0.017	0.0074	0.017	0.0081	0.014	0.016	0.015	0.015	0.015
Median Concentration *	0.025	0.01	0.025	0.025	0.01	0.025	0.01	0.025	0.025	0.025	0.025	0.025
Standard Deviation *	0.011	0.0051	0.054	0.0086	0.0051	0.0086	0.011	0.0092	0.0083	0.0088	0.0088	0.0088
Geometric Standard Deviation *	3.4	3.2	3.8	3.3	3.2	3.3	3.5	3.4	3.3	3.3	3.3	3.3
95% UCL (Student's-t) *	0.0266	0.0111	0.0466	0.0248	0.0111	0.0248	0.0145	0.0221	0.0231	0.0223	0.0223	0.0223
Number of Env Standard Exceedances	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
% of Detects	0	0	0	0	0	0	0	0	1	0	0	0
% of Non-Detects	100	100	100	100	100	100	100	100	99	100	100	100
% of Detects at or above Env Standards	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

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Reported Analyte LOR is higher than Requested Analyte LOR

#2 Quantification of linear and branched isomers has been conducted as a single total response using the relative response factor fr



Appendix B
Table B5j
Historical Water Analytical Results - Telegraph Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids			
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Sum of US EPA PFAS (PFOS + PFOA)*	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluorooheptane sulfonic acid (PFHpS)
	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	0.01	0.01	0.01
0020_0021_Human health consumption of biota					0.01							
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%	0.13		220									
PFAS NEMP 3.0 2025 Recreational water quality	2	2	10		2							

Catchment	SPR	Location	Field ID	Date	Lab Report No.												
Telegraph Creek	Receptor	0021_SW068	0021_QC211_211021	21 Oct 2021	281322	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.01	<0.02	-	<0.01
Telegraph Creek	Receptor	0021_SW068	0021_SW068_211021	21 Oct 2021	ES2138639	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02
Telegraph Creek	Receptor	0021_SW068	0021_QC207_220407	07 Apr 2022	293031	0.02	<0.01	<0.01	0.02	0.02	-	0.02	-	<0.01	<0.02	-	<0.01
Telegraph Creek	Receptor	0021_SW068	0021_SW068_220407	07 Apr 2022	ES2212442	0.02	<0.01	<0.01	0.02	0.02	-	-	-	<0.02	<0.02	-	<0.02
Telegraph Creek	Receptor	0021_SW068	0021_SW068_221012	12 Oct 2022	ES2237106	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02
Telegraph Creek	Receptor	0021_SW068	0021_SW068_230417	17 Apr 2023	ES2313364	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02
Telegraph Creek	Receptor	0021_SW068	0021_SW068_231016	16 Oct 2023	ES2336399	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02
Telegraph Creek	Receptor	0021_SW068	0021_SW068_240410	10 Apr 2024	ES2412012	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02
Telegraph Creek	Receptor	0021_SW068	0021_SW068_241025	25 Oct 2024	ES2435541	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02
Telegraph Creek	Receptor	0021_SW068	0021_QC103_250401	01 Apr 2025	ES2510113	0.01	<0.01	<0.01	0.01	0.01	-	-	-	<0.02	<0.02	-	<0.02
Telegraph Creek	Receptor	0021_SW068	0021_QC203_250401	01 Apr 2025	1210052	<0.01	<0.01	<0.01	<0.1	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Telegraph Creek	Receptor	0021_SW068	0021_SW068_250401	01 Apr 2025	ES2510623	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02
Telegraph Creek	Receptor	0021_SW068	0021_SW068_251020	20 Oct 2025	ES2533538	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02

Statistics

Number of Results	13	13	13	13	13	11	3	1	13	13	1	13
Number of Detects	3	0	0	3	3	2	1	0	0	0	0	0
Minimum Concentration	0.01	<0.01	<0.01	0.01	0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Minimum Detect	0.01	ND	ND	0.01	0.01	0.01	0.02	ND	ND	ND	ND	ND
Maximum Concentration	0.02	<0.01	<0.01	<0.1	0.02	<0.05	0.02	<0.01	<0.02	<0.02	<0.01	<0.02
Maximum Detect	0.02	ND	ND	0.02	0.02	0.02	0.02	ND	ND	ND	ND	ND
Average Concentration *	0.0077	0.005	0.005	0.011	0.0077	0.0086	0.01		0.0088	0.0096		0.0088
Geometric Average *	0.0065	0.005	0.005	0.0078	0.0065	0.007	0.0079	0.005	0.0085	0.0095	0.005	0.0085
Median Concentration *	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.01	0.01	0.005	0.01
Standard Deviation *	0.0056	0	0	0.013	0.0056	0.0071	0.0087		0.0022	0.0014		0.0022
Geometric Standard Deviation *	1.7	1	1	2.2	1.7	1.8	2.2		1.4	1.2		1.4
95% UCL (Student's-t) *	0.0105	0.005	0.005	0.0175	0.0105	0.0125	0.0246		0.00993	0.0103		0.00993
Number of Env Standard Exceedances	3	0	0	0	3	0	0	0	0	0	0	0
Number of Env Standard Exceedances (Detects Only)	3	0	0	0	3	0	0	0	0	0	0	0
% of Detects	23	0	0	23	23	18	33	0	0	0	0	0
% of Non-Detects	77	100	100	77	77	82	67	100	100	100	100	100
% of Detects at or above Env Standards	23	0	0	0	23	0	0	0	0	0	0	0
% of Results Below Env Standards or Non-Detect	77	100	100	100	77	100	100	100	100	100	100	100

* A Non Detect Multiplier of 0.5 has been applied.



Appendix B
Table B5j
Historical Water Analytical Results - Telegraph Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Carboxylic Acids											
	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTriDA)	Perfluoroundecanoic acid (PFUnDA)
EQL	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0020_0021_Human health consumption of biota												
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%												
PFAS NEMP 3.0 2025 Recreational water quality												

Catchment	SPR	Location	Field ID	Date	Lab Report No.												
Telegraph Creek	Receptor	0021_SW068	0021_QC211_211021	21 Oct 2021	281322	-	<0.01	<0.02	<0.02	<0.05	<0.01	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02
Telegraph Creek	Receptor	0021_SW068	0021_SW068_211021	21 Oct 2021	ES2138639	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Telegraph Creek	Receptor	0021_SW068	0021_QC207_220407	07 Apr 2022	293031	-	<0.01	<0.02	<0.02	<0.05	<0.01	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02
Telegraph Creek	Receptor	0021_SW068	0021_SW068_220407	07 Apr 2022	ES2212442	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Telegraph Creek	Receptor	0021_SW068	0021_SW068_221012	12 Oct 2022	ES2237106	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Telegraph Creek	Receptor	0021_SW068	0021_SW068_230417	17 Apr 2023	ES2313364	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Telegraph Creek	Receptor	0021_SW068	0021_SW068_231016	16 Oct 2023	ES2336399	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Telegraph Creek	Receptor	0021_SW068	0021_SW068_240410	10 Apr 2024	ES2412012	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Telegraph Creek	Receptor	0021_SW068	0021_SW068_241025	25 Oct 2024	ES2435541	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Telegraph Creek	Receptor	0021_SW068	0021_QC103_250401	01 Apr 2025	ES2510113	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Telegraph Creek	Receptor	0021_SW068	0021_QC203_250401	01 Apr 2025	1210052	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Telegraph Creek	Receptor	0021_SW068	0021_SW068_250401	01 Apr 2025	ES2510623	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Telegraph Creek	Receptor	0021_SW068	0021_SW068_251020	20 Oct 2025	ES2533538	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02

Statistics													
Number of Results	1	13	13	13	13	13	13	13	13	13	13	13	13
Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.01	<0.02	<0.1	<0.02	<0.05	<0.02	<0.02	<0.02	<0.02	<0.02	<0.5	<0.1	<0.02
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *		0.0088	0.042	0.0096	0.012	0.0088	0.0088	0.0088	0.0088	0.0096	0.058	0.016	0.0096
Geometric Average *	0.005	0.0085	0.037	0.0095	0.011	0.0085	0.0085	0.0085	0.0085	0.0095	0.031	0.012	0.0095
Median Concentration *	0.005	0.01	0.05	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.025	0.01	0.01
Standard Deviation *		0.0022	0.016	0.0014	0.006	0.0022	0.0022	0.0022	0.0022	0.0014	0.085	0.015	0.0014
Geometric Standard Deviation *		1.4	1.8	1.2	1.5	1.4	1.4	1.4	1.4	1.2	2.8	1.9	1.2
95% UCL (Student's-t) *		0.00993	0.0497	0.0103	0.0149	0.00993	0.00993	0.00993	0.00993	0.0103	0.1	0.0233	0.0103
Number of Env Standard Exceedances	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
% of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Non-Detects	100	100	100	100	100	100	100	100	100	100	100	100	100
% of Detects at or above Env Standards	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

* A Non Detect Multiplier of 0.5 has been applied.



Appendix B
Table B5j
Historical Water Analytical Results - Telegraph Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
	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
EQL	0.05	0.02	0.05	0.05	0.02	0.05	0.02	0.01	0.01	0.01	0.01
0020_0021_Human health consumption of biota											
PFAS NEMP 3.0 2025 Freshwater and Interim marine 95%											
PFAS NEMP 3.0 2025 Recreational water quality											

Catchment	SPR	Location	Field ID	Date	Lab Report No.											
Telegraph Creek	Receptor	0021_SW068	0021_QC211_211021	21 Oct 2021	281322	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Telegraph Creek	Receptor	0021_SW068	0021_SW068_211021	21 Oct 2021	ES2138639	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Telegraph Creek	Receptor	0021_SW068	0021_QC207_220407	07 Apr 2022	293031	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Telegraph Creek	Receptor	0021_SW068	0021_SW068_220407	07 Apr 2022	ES2212442	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Telegraph Creek	Receptor	0021_SW068	0021_SW068_221012	12 Oct 2022	ES2237106	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Telegraph Creek	Receptor	0021_SW068	0021_SW068_230417	17 Apr 2023	ES2313364	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Telegraph Creek	Receptor	0021_SW068	0021_SW068_231016	16 Oct 2023	ES2336399	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Telegraph Creek	Receptor	0021_SW068	0021_SW068_240410	10 Apr 2024	ES2412012	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Telegraph Creek	Receptor	0021_SW068	0021_SW068_241025	25 Oct 2024	ES2435541	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Telegraph Creek	Receptor	0021_SW068	0021_QC103_250401	01 Apr 2025	ES2510113	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Telegraph Creek	Receptor	0021_SW068	0021_QC203_250401	01 Apr 2025	1210052	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Telegraph Creek	Receptor	0021_SW068	0021_SW068_250401	01 Apr 2025	ES2510623	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Telegraph Creek	Receptor	0021_SW068	0021_SW068_251020	20 Oct 2025	ES2533538	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05

Statistics												
Number of Results	13	13	13	13	13	13	13	13	13	13	13	13
Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.1	<0.05	<0.5	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *	0.029	0.011	0.06	0.025	0.011	0.025	0.017	0.02	0.022	0.021	0.021	0.021
Geometric Average *	0.028	0.011	0.036	0.025	0.011	0.025	0.014	0.017	0.02	0.019	0.019	0.019
Median Concentration *	0.025	0.01	0.025	0.025	0.01	0.025	0.01	0.025	0.025	0.025	0.025	0.025
Standard Deviation *	0.0094	0.0042	0.084	0	0.0042	0	0.015	0.0088	0.0075	0.0074	0.0074	0.0074
Geometric Standard Deviation *	1.3	1.3	2.4	1	1.3	1	1.9	2	1.8	1.7	1.7	1.7
95% UCL (Student's-t) *	0.0335	0.0132	0.101	0.025	0.0132	0.025	0.0248	0.0247	0.0256	0.0248	0.0248	0.0248
Number of Env Standard Exceedances	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
% of Detects	0	0	0	0	0	0	0	0	0	0	0	0
% of Non-Detects	100	100	100	100	100	100	100	100	100	100	100	100
% of Detects at or above Env Standards	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

* A Non Detect Multiplier of 0.5 has been applied.



Appendix B
Table B6a
Historical Sediment Analytical Results - Captains Lagoon, Flatrock Creek, Mary Creek

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acid			
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Sum of US EPA PFAS (PFOS + PFOA)*	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecane sulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluorooctane sulfonic acid (PFHpS)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.005	0.0001	0.0002	0.0002	0.0001

Catchment	SPR	Location	Field ID	Date	Lab Report No.												
Captains Lagoon	Pathway	0021_SD009	CL_SED09_0-0.05	18 Apr 2017	ES1709535	0.0134	0.0027	0.0003	0.0188	0.0161	0.0186	-	-	<0.0002	<0.0002	-	0.0002
Captains Lagoon	Pathway	0021_SD009	0021_SD009_211020	20 Oct 2021	ES2138639	0.0525	0.0050	0.0002	0.0621	0.0575	0.0591	-	-	0.0004	0.0013	-	0.0004
Captains Lagoon	Pathway	0021_SD009	0021_SD009_221010	10 Oct 2022	ES2237106	0.0265	0.0041	0.0003	0.0329	0.0306	0.0329	-	-	<0.0002	<0.0002	-	<0.0002
Captains Lagoon	Pathway	0021_SD009	0021_SD009_230417	17 Apr 2023	ES2313364	0.0315	0.0093	<0.0002	0.0429	0.0408	0.0413	-	-	0.0003	0.0005	-	0.0005
Captains Lagoon	Pathway	0021_SD009	0021_SD009_231016	16 Oct 2023	ES2336399	0.0661	0.0096	<0.0005 ^{#1}	0.0782	0.0757	0.0764	-	-	0.0007	0.0012	-	0.0006
Captains Lagoon	Pathway	0021_SD009	0021_SD009_240410	10 Apr 2024	ES2411995	0.0182	0.0030	<0.0002	0.0214	0.0212	0.0212	-	-	<0.0002	0.0002	-	<0.0002
Captains Lagoon	Pathway	0021_SD009	0021_SD009_241022	22 Oct 2024	ES2435078	0.0740	0.0214	<0.0025 ^{#1}	0.100	0.0954	0.100	-	-	0.0046	<0.0025 ^{#1}	-	<0.0025 ^{#1}
Captains Lagoon	Pathway	0021_SD009	0021_SD009_250401	01 Apr 2025	ES2510622	0.0093	0.0022	<0.0002	0.0115	0.0115	0.0115	-	-	<0.0002	<0.0002	-	<0.0002
Captains Lagoon	Pathway	0021_SD009	0021_SD009_251023	23 Oct 2025	ES2533521	0.0071	0.0016	<0.0002	0.0087	0.0087	0.0087	-	-	<0.0002	<0.0002	-	<0.0002
Captains Lagoon	Pathway	0021_SD011	CL_SED11_0-0.05	20 Apr 2017	ES1709644	0.0027	<0.0002	<0.0002	0.0027	0.0027	0.0027	-	-	<0.0002	<0.0002	-	<0.0002
Captains Lagoon	Pathway	0021_SD011	JCQA05	20 Apr 2017	ES1709644	0.0020	<0.0002	<0.0002	0.0020	0.0020	0.0020	-	-	<0.0002	<0.0002	-	<0.0002
Captains Lagoon	Pathway	0021_SD011	0021_SD011_241026	26 Oct 2024	ES2435541	0.0029	0.0007	<0.0002	0.0036	0.0036	0.0036	-	-	<0.0002	<0.0002	-	<0.0002
Captains Lagoon	Pathway	0021_SD011	0021_SD011_250401	01 Apr 2025	ES2510622	0.0010	0.0004	<0.0002	0.0014	0.0014	0.0014	-	-	<0.0002	<0.0002	-	<0.0002
Captains Lagoon	Pathway	0021_SD011	0021_SD011_251022	22 Oct 2025	ES2533521	0.0019	0.0007	<0.0002	0.0026	0.0026	0.0026	-	-	<0.0002	<0.0002	-	<0.0002
Captains Lagoon	Receptor	0020_SD019	CL_SED02_0-0.05	18 Apr 2017	ES1709535	0.0024	<0.0002	<0.0002	0.0024	0.0024	0.0024	-	-	<0.0002	<0.0002	-	<0.0002
Captains Lagoon	Receptor	0020_SD019	CL_SD02_0.0_180501	01 May 2018	ES1812871	0.0024	0.0004	<0.0002	0.0028	0.0028	0.0028	-	-	<0.0002	<0.0002	-	<0.0002
Captains Lagoon	Receptor	0020_SD019	0020_QC201_211018	18 Oct 2021	281319	0.011	0.0004	<0.0001	0.011	0.011	-	0.011	-	<0.0001	<0.0002	-	<0.0001
Captains Lagoon	Receptor	0020_SD019	0020_SD019_211018	18 Oct 2021	ES2138638	0.0096	0.0003	<0.0002	0.0099	0.0099	0.0099	-	-	<0.0002	<0.0002	-	<0.0002
Captains Lagoon	Receptor	0020_SD019	0020_SD019_220404	04 Apr 2022	ES2212597	0.0079	0.0006	<0.0002	0.0085	0.0085	0.0085	-	-	<0.0002	<0.0002	-	<0.0002
Captains Lagoon	Receptor	0020_SD019	0020_SD019_221011	11 Oct 2022	ES2237104	0.0560	0.0017	0.0007	0.0648	0.0577	0.0610	-	-	<0.0002	0.0004	-	0.0003
Captains Lagoon	Receptor	0020_SD019	0020_SD019_230417	17 Apr 2023	ES2313254	0.0176	0.0019	0.0002	0.0202	0.0195	0.0197	-	-	<0.0002	<0.0002	-	<0.0002
Captains Lagoon	Receptor	0020_SD019	0020_SD019_231016	16 Oct 2023	ES2336397	0.430	0.0228	<0.0010 ^{#1}	0.459	0.453	0.454	-	-	<0.0010 ^{#1}	<0.0010 ^{#1}	-	0.0020
Captains Lagoon	Receptor	0020_SD019	0020_QC103_240408	08 Apr 2024	ES2411964	0.0094	0.0007	<0.0002	0.0108	0.0101	0.0101	-	-	<0.0002	<0.0002	-	<0.0002
Captains Lagoon	Receptor	0020_SD019	0020_QC203_240408	08 Apr 2024	348827	0.01	0.0005	0.0001	0.011	0.011	-	0.01	-	<0.0001	<0.0002	-	<0.0001
Captains Lagoon	Receptor	0020_SD019	0020_SD019_240408	08 Apr 2024	ES2411964	0.0116	0.0007	<0.0002	0.0137	0.0123	0.0123	-	-	<0.0002	<0.0002	-	<0.0002
Captains Lagoon	Receptor	0020_SD019	0020_SD019_241025	25 Oct 2024	ES2435539	0.0017	<0.0002	<0.0002	0.0019	0.0017	0.0017	-	-	<0.0002	<0.0002	-	0.0002
Captains Lagoon	Receptor	0020_SD019	0020_SD019_250331	31 Mar 2025	ES2510618	0.0012	<0.0002	<0.0002	0.0012	0.0012	0.0012	-	-	<0.0002	<0.0002	-	<0.0002
Captains Lagoon	Receptor	0020_SD019	0020_SD019_251020	20 Oct 2025	ES2533546	0.0019	<0.0002	<0.0002	0.0019	0.0019	0.0019	-	-	<0.0002	<0.0002	-	<0.0002
Captains Lagoon	Receptor	0020_SD024	CL_SED07_0-0.05	18 Apr 2017	ES1709535	0.0127	0.0018	<0.0002	0.0145	0.0145	0.0145	-	-	<0.0002	<0.0002	-	<0.0002
Captains Lagoon	Receptor	0020_SD024	CL_QC220_180501	01 May 2018	597346	<0.005	<0.005	<0.005	<0.05	<0.005	<0.01	-	-	<0.005	<0.005	-	<0.005
Captains Lagoon	Receptor	0020_SD024	CL_SD07_0.0_180501	01 May 2018	ES1812871	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	-	<0.0002	<0.0002	-	<0.0002
Captains Lagoon	Receptor	0020_SD024	0020_SD024_211018	18 Oct 2021	ES2138638	0.0008	<0.0002	<0.0002	0.0008	0.0008	0.0008	-	-	<0.0002	<0.0002	-	<0.0002
Captains Lagoon	Receptor	0020_SD024	0020_SD024_220404	04 Apr 2022	ES2212597	0.0003	<0.0002	<0.0002	0.0003	0.0003	0.0003	-	-	<0.0002	<0.0002	-	<0.0002
Captains Lagoon	Receptor	0020_SD024	0020_SD024_221012	10 Oct 2022	ES2236866	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	-	<0.0002	<0.0002	-	<0.0002
Captains Lagoon	Receptor	0020_SD024	0020_SD024_221012	12 Oct 2022	ES2237104	0.0003	<0.0002	<0.0002	0.0003	0.0003	0.0003	-	-	<0.0002	<0.0002	-	<0.0002
Captains Lagoon	Receptor	0020_SD024	0020_QC140_230130	30 Jan 2023	ES2303447	0.0005	<0.0002	<0.0002	0.0005	0.0005	0.0005	-	-	<0.0002	<0.0002	-	<0.0002
Captains Lagoon	Receptor	0020_SD024	0020_SD024_230130	30 Jan 2023	ES2303447	0.0011	<0.0002	<0.0002	0.0011	0.0011	0.0011	-	-	<0.0002	<0.0002	-	<0.0002
Captains Lagoon	Receptor	0020_SD024	0020_SD024_230417	17 Apr 2023	ES2313254	0.0012	<0.0002	<0.0002	0.0012	0.0012	0.0012	-	-	<0.0002	<0.0002	-	<0.0002
Captains Lagoon	Receptor	0020_SD024	0020_SD024_231016	16 Oct 2023	ES2336397	0.0005	<0.0002	<0.0002	0.0005	0.0005	0.0005	-	-	<0.0002	<0.0002	-	<0.0002
Captains Lagoon	Receptor	0020_SD024	0020_SD024_240408	08 Apr 2024	ES2411964	0.0016	<0.0002	<0.0002	0.0016	0.0016	0.0016	-	-	<0.0002	<0.0002	-	<0.0002
Captains Lagoon	Receptor	0020_SD024	0020_QC111_241025	25 Oct 2024	ES2435539	0.0109	0.0009	<0.0002	0.0145	0.0118	0.0131	-	-	<0.0002	0.0008	-	0.0006
Captains Lagoon	Receptor	0020_SD024	0020_QC211_241025	25 Oct 2024	1156671	<0.005	<0.005	<0.005	<0.05	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Captains Lagoon	Receptor	0020_SD024	0020_SD024_241025	25 Oct 2024	ES2435539	0.0144	0.0014	<0.0002	0.0178	0.0158	0.0158	-	-	<0.0002	0.0009	-	0.0008
Captains Lagoon	Receptor	0020_SD024	0020_SD024_250331	31 Mar 2025	ES2510618	0.0008	<0.0002	<0.0002	0.0008	0.0008	0.0008	-	-	<0.0002	<0.0002	-	<0.0002
Captains Lagoon	Receptor	0020_SD024	0020_QC101_251020	20 Oct 2025	ES2533546	0.113	0.0030	0.0005	0.123	0.116	0.117	-	-	<0.0002	0.0015	-	0.0003
Captains Lagoon	Receptor	0020_SD024	0020_QC201_251020	20 Oct 2025	1285219	0.039	<0.005	<0.005	<0.05	0.039	0.039	-	-	<0.005	<0.005	<0.005	<0.005
Captains Lagoon	Receptor	0020_SD024	0020_SD024_251020	20 Oct 2025	ES2533546	0.0743	0.0032	0.0004	0.0819	0.0775	0.0782	-	-	<0.0002	0.0011	-	0.0003



Appendix B
Table B6a
Historical Sediment Analytical Results - Captains Lagoon, Flatrock Creek, Mary Creek

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acid			
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Sum of US EPA PFAS (PFOS + PFOA)*	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecane sulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluorooctane sulfonic acid (PFHpS)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.005	0.0001	0.0002	0.0002	0.0001

Catchment	SPR	Location	Field ID	Date	Lab Report No.												
Flatrock Creek	Pathway	0021_SD018	FC_SED06_0.0-0.1	19 Apr 2017	ES1709535	0.0198	0.0034	0.0003	0.0248	0.0232	0.0242	-	-	0.0004	<0.0002	-	0.0003
Flatrock Creek	Pathway	0021_SD018	0021_QC209_211020	20 Oct 2021	281322	0.17	0.025	0.0012	0.22	0.2	-	0.17	-	<0.001	<0.002	-	0.0020
Flatrock Creek	Pathway	0021_SD018	0021_SD018_211020	20 Oct 2021	ES2138639	0.0811	0.0169	0.0006	0.106	0.0980	0.104	-	-	0.0004	<0.0002	-	0.0015
Flatrock Creek	Pathway	0021_SD018	0021_QC111_220407	07 Apr 2022	ES2212442	0.0633	0.0085	0.0005	0.0773	0.0718	0.0753	-	-	<0.0002	0.0009	-	0.0006
Flatrock Creek	Pathway	0021_SD018	0021_QC211_220407	07 Apr 2022	293031	0.043	0.0042	<0.0003	0.049	0.047	-	0.043	-	<0.0003	0.0006	-	0.0004
Flatrock Creek	Pathway	0021_SD018	0021_SD018_220407	07 Apr 2022	ES2212442	0.0344	0.0060	<0.0002	0.0429	0.0404	0.0420	-	-	0.0003	0.0003	-	0.0004
Flatrock Creek	Pathway	0021_SD018	0021_SD018_221012	12 Oct 2022	ES2237106	0.0415	0.0053	<0.0002	0.0473	0.0468	0.0473	-	-	<0.0002	<0.0002	-	<0.0002
Flatrock Creek	Pathway	0021_SD018	0021_SD018_230419	19 Apr 2023	ES2313364	0.106	0.0114	0.0011	0.124	0.117	0.121	-	-	<0.0002	0.0015	-	0.0013
Flatrock Creek	Pathway	0021_SD018	0021_SD018_231018	18 Oct 2023	ES2336399	0.0177	0.0024	<0.0002	0.0207	0.0201	0.0205	-	-	0.0002	<0.0002	-	0.0002
Flatrock Creek	Pathway	0021_SD018	0021_SD018_240410	10 Apr 2024	ES2411995	0.0534	0.0082	0.0002	0.0634	0.0616	0.0621	-	-	0.0003	0.0005	-	0.0004
Flatrock Creek	Pathway	0021_SD018	0021_SD018_241026	26 Oct 2024	ES2435541	0.0344	0.0032	<0.0002	0.0379	0.0376	0.0376	-	-	<0.0002	0.0003	-	<0.0002
Flatrock Creek	Pathway	0021_SD018	0021_SD018_250403	03 Apr 2025	ES2510622	0.0341	0.0062	<0.0002	0.0421	0.0403	0.0403	-	-	<0.0002	0.0006	-	0.0003
Flatrock Creek	Pathway	0021_SD018	0021_QC126_251022	22 Oct 2025	ES2533538	0.0375	0.0060	<0.0002	0.0435	0.0435	0.0435	-	-	<0.0002	<0.0002	-	<0.0002
Flatrock Creek	Pathway	0021_SD018	0021_QC226_251022	22 Oct 2025	1285374	0.012 ^{#2}	<0.005	<0.005	<0.05	0.012	0.012	-	-	<0.005	<0.005	<0.005	<0.005
Flatrock Creek	Pathway	0021_SD018	0021_SD018_251022	22 Oct 2025	ES2533521	0.0382	0.0051	<0.0002	0.0440	0.0433	0.0440	-	-	0.0007	<0.0002	-	<0.0002
Flatrock Creek	Pathway	0021_SD021	AB_SED09_0.0-0.05	20 Apr 2017	ES1709644	0.0068	0.0005	<0.0002	0.0073	0.0073	0.0073	-	-	<0.0002	<0.0002	-	<0.0002
Flatrock Creek	Pathway	0021_SD021	0021_SD021_211026	26 Oct 2021	ES2138639	0.0384	0.0028	<0.0002	0.0426	0.0412	0.0421	-	-	0.0004	<0.0002	-	<0.0002
Flatrock Creek	Pathway	0021_SD021	0021_SD021_220407	07 Apr 2022	ES2212442	0.0270	0.0022	<0.0002	0.0304	0.0292	0.0296	-	-	<0.0002	0.0003	-	0.0003
Flatrock Creek	Pathway	0021_SD021	0021_SD021_221013	13 Oct 2022	ES2237106	0.0524	0.0027	0.0003	0.0572	0.0551	0.0561	-	-	<0.0002	<0.0002	-	<0.0002
Flatrock Creek	Pathway	0021_SD021	0021_QC102_230419	19 Apr 2023	ES2313364	0.0124	0.0007	<0.0002	0.0145	0.0131	0.0143	-	-	0.0010	<0.0002	-	<0.0002
Flatrock Creek	Pathway	0021_SD021	0021_QC202_230419	19 Apr 2023	321517	0.018	0.0011	0.0002	0.021	0.019	-	0.018	-	<0.0001	0.0005	-	0.0001
Flatrock Creek	Pathway	0021_SD021	0021_SD021_230419	19 Apr 2023	ES2313364	0.0254	0.0012	0.0002	0.0283	0.0266	0.0272	-	-	<0.0002	0.0004	-	<0.0002
Flatrock Creek	Pathway	0021_SD021	0021_SD021_231018	18 Oct 2023	ES2336399	0.0052	0.0003	<0.0002	0.0057	0.0055	0.0057	-	-	0.0002	<0.0002	-	<0.0002
Flatrock Creek	Pathway	0021_SD021	0021_SD021_240410	10 Apr 2024	ES2411995	0.0048	0.0010	<0.0002	0.0058	0.0058	0.0058	-	-	<0.0002	<0.0002	-	<0.0002
Flatrock Creek	Pathway	0021_SD021	0021_SD021_241023	23 Oct 2024	ES2435078	0.0325	0.0027	0.0002	0.0364	0.0352	0.0358	-	-	<0.0002	<0.0002	-	0.0006
Flatrock Creek	Pathway	0021_SD021	0021_SD021_250404	04 Apr 2025	ES2510622	0.0329	0.0045	0.0003	0.0423	0.0374	0.0403	-	-	<0.0002	<0.0002	-	0.0003
Flatrock Creek	Pathway	0021_SD021	0021_SD021_251021	21 Oct 2025	ES2533521	0.0360	0.0016	<0.0002	0.0380	0.0376	0.0380	-	-	0.0004	<0.0002	-	<0.0002
Flatrock Creek	Receptor	0020_SD002	FC_SED02_0.0-0.05	19 Apr 2017	ES1709535	0.0034	0.0022	<0.0002	0.006	0.0056	0.0056	-	-	<0.0002	<0.0002	-	0.0004
Flatrock Creek	Receptor	0020_SD002	FC_SD02_0.0_180515	15 May 2018	ES1814324	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	-	<0.0002	<0.0002	-	<0.0002
Flatrock Creek	Receptor	0020_SD002	0020_QC203_211019	19 Oct 2021	281319	0.0002	<0.0001	<0.0001	0.0002	0.0002	-	0.0002	-	<0.0001	<0.0002	-	<0.0001
Flatrock Creek	Receptor	0020_SD002	0020_SD002_211019	19 Oct 2021	ES2138638	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	-	<0.0002	<0.0002	-	<0.0002
Flatrock Creek	Receptor	0020_SD002	0020_QC101_220404	04 Apr 2022	ES2212597	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	-	<0.0002	<0.0002	-	<0.0002
Flatrock Creek	Receptor	0020_SD002	0020_SD002_220404	04 Apr 2022	ES2212597	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	-	<0.0002	<0.0002	-	<0.0002
Flatrock Creek	Receptor	0020_SD002	0020_SD002_221010	10 Oct 2022	ES2237104	0.0004	<0.0002	<0.0002	0.0004	0.0004	0.0004	-	-	<0.0002	<0.0002	-	<0.0002
Flatrock Creek	Receptor	0020_SD002	0020_SD002_230417	17 Apr 2023	ES2313254	0.0032	0.0010	<0.0002	0.0042	0.0042	0.0042	-	-	<0.0002	<0.0002	-	<0.0002
Flatrock Creek	Receptor	0020_SD002	0020_SD002_231016	16 Oct 2023	ES2336397	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	-	<0.0002	<0.0002	-	<0.0002
Flatrock Creek	Receptor	0020_SD002	0020_SD002_240408	08 Apr 2024	ES2411964	0.0007	0.0004	<0.0002	0.0011	0.0011	0.0011	-	-	<0.0002	<0.0002	-	<0.0002
Flatrock Creek	Receptor	0020_SD002	0020_SD002_241025	25 Oct 2024	ES2435539	0.0004	<0.0002	<0.0002	0.0004	0.0004	0.0004	-	-	<0.0002	<0.0002	-	<0.0002
Flatrock Creek	Receptor	0020_SD002	0020_QC252_250401	01 Apr 2025	1209674	<0.005	<0.005	<0.005	<0.05	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Flatrock Creek	Receptor	0020_SD002	0020_SD002_250401	01 Apr 2025	ES2510618	0.0017	0.0002	<0.0002	0.0019	0.0019	0.0019	-	-	<0.0002	<0.0002	-	<0.0002
Flatrock Creek	Receptor	0020_SD002	0020_SD002_251020	20 Oct 2025	ES2533546	0.0004	<0.0002	<0.0002	0.0004	0.0004	0.0004	-	-	<0.0002	<0.0002	-	<0.0002
Flatrock Creek	Receptor	0020_SD004	FC_SED04_0.0-0.05	19 Apr 2017	ES1709535	0.0009	0.0005	<0.0002	0.0014	0.0014	0.0014	-	-	<0.0002	<0.0002	-	<0.0002
Flatrock Creek	Receptor	0020_SD004	FC_SD04_0.0_180515	15 May 2018	ES1814324	0.0013	0.0004	<0.0002	0.0017	0.0017	0.0017	-	-	<0.0002	<0.0002	-	<0.0002
Flatrock Creek	Receptor	0020_SD004	FC_SD04_0.2_180515	15 May 2018	ES1814324	0.0012	0.0005	<0.0002	0.0017	0.0017	0.0017	-	-	<0.0002	<0.0002	-	<0.0002
Flatrock Creek	Receptor	0020_SD004	0020_SD004_211018	18 Oct 2021	ES2138638	0.0022	0.0003	<0.0002	0.0025	0.0025	0.0025	-	-	<0.0002	<0.0002	-	<0.0002
Flatrock Creek	Receptor	0020_SD004	0020_SD004_220404	04 Apr 2022	ES2212597	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	-	<0.0002	<0.0002	-	<0.0002
Flatrock Creek	Receptor	0020_SD004	0020_SD004_221010	10 Oct 2022	ES2237104	0.0007	<0.0002	<0.0002	0.0007	0.0007	0.0007	-	-	<0.0002	<0.0002	-	<0.0002



Appendix B
Table B6a
Historical Sediment Analytical Results - Captains Lagoon, Flatrock Creek, Mary Creek

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acid			
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Sum of US EPA PFAS (PFOS + PFOA)*	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluoronane sulfonate (PFNS)	Perfluoroheptane sulfonic acid (PFHpS)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.005	0.0001	0.0002	0.0002	0.0001

Catchment	SPR	Location	Field ID	Date	Lab Report No.												
Flatrock Creek	Receptor	0020_SD004	0020_SD004_230417	17 Apr 2023	ES2313254	0.0017	<0.0002	<0.0002	0.0017	0.0017	0.0017	-	-	<0.0002	<0.0002	-	<0.0002
Flatrock Creek	Receptor	0020_SD004	0020_SD004_231016	16 Oct 2023	ES2336397	0.0056	0.0004	<0.0002	0.0060	0.0060	0.0060	-	-	<0.0002	<0.0002	-	<0.0002
Flatrock Creek	Receptor	0020_SD004	0020_SD004_240408	08 Apr 2024	ES2411964	0.0048	0.0003	<0.0002	0.0051	0.0051	0.0051	-	-	<0.0002	<0.0002	-	<0.0002
Flatrock Creek	Receptor	0020_SD004	0020_QC150_241021	21 Oct 2024	ES2435143	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	-	<0.0002	<0.0002	-	<0.0002
Flatrock Creek	Receptor	0020_SD004	0020_SD004_241021	21 Oct 2024	ES2435143	0.0002	<0.0002	<0.0002	0.0002	0.0002	0.0002	-	-	<0.0002	<0.0002	-	<0.0002
Flatrock Creek	Receptor	0020_SD004	0020_QC151_250331	31 Mar 2025	ES2510618	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	-	<0.0002	<0.0002	-	<0.0002
Flatrock Creek	Receptor	0020_SD004	0020_SD004_250331	31 Mar 2025	ES2510618	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	-	<0.0002	<0.0002	-	<0.0002
Flatrock Creek	Receptor	0020_SD004	0020_SD004_251020	20 Oct 2025	ES2533546	0.0005	<0.0002	<0.0002	0.0005	0.0005	0.0005	-	-	<0.0002	<0.0002	-	<0.0002
Mary Creek	Pathway	0021_SD006	B_SED01_0.3-0.4	12 Apr 2017	ES1709064	0.0255	0.0043	0.0004	0.0307	0.0298	0.0302	-	-	<0.0002	<0.0002	-	0.0005
Mary Creek	Pathway	0021_SD006	0021_SD006_211020	20 Oct 2021	ES2138639	0.791	0.0684	0.0028	0.910	0.859	0.874	-	-	0.0017	0.0204	-	0.0065
Mary Creek	Pathway	0021_SD006	0021_SD006_221012	12 Oct 2022	ES2237106	0.500	0.0533	0.0022	0.597	0.553	0.562	-	-	0.0018	0.0170	-	0.0051
Mary Creek	Pathway	0021_SD006	0021_SD006_230419	19 Apr 2023	ES2313364	0.0910	0.0109	0.0005	0.115	0.102	0.104	-	-	<0.0002	0.0088	-	0.0011
Mary Creek	Pathway	0021_SD006	0021_SD006_231018	18 Oct 2023	ES2336399	0.991	0.112	0.0072	1.18	1.10	1.14	-	-	0.0021	0.0193	-	0.0124
Mary Creek	Pathway	0021_SD006	0021_SD006_240410	10 Apr 2024	ES2411995	0.131	0.0173	0.0004	0.167	0.148	0.156	-	-	0.0003	0.0082	-	0.0006
Mary Creek	Pathway	0021_SD006	0021_SD006_241025	25 Oct 2024	ES2435541	0.262	0.0391	0.0014	0.335	0.301	0.317	-	-	0.0027	0.0106	-	0.0027
Mary Creek	Pathway	0021_SD006	0021_SD006_250130	30 Jan 2025	ES2503552	0.511	0.0506	0.0026	0.602	0.562	0.567	-	-	0.0017	0.0249	-	0.0047
Mary Creek	Pathway	0021_SD006	0021_SD006_250404	04 Apr 2025	ES2510622	0.150	0.0229	0.0008	0.194	0.173	0.179	-	-	0.0006	0.0093	-	0.0014
Mary Creek	Pathway	0021_SD006	0021_SD006_250805	05 Aug 2025	ES2524252	0.0029	0.0003	<0.0002	0.0032	0.0032	0.0032	-	-	<0.0002	<0.0002	-	<0.0002
Mary Creek	Pathway	0021_SD006	0021_SD006_250825	25 Aug 2025	ES2526742	0.106	0.0103	0.0006	0.121	0.116	0.118	-	-	0.0004	0.0004	0.0004	0.0009
Mary Creek	Pathway	0021_SD006	0021_SD006_250912	12 Sep 2025	ES2528885	0.300	0.0128	0.0011	0.322	0.313	0.315	-	-	0.0002	0.0016	-	0.0029
Mary Creek	Pathway	0021_SD036	MC_SD02_0.0_180323	23 Mar 2018	ES1809241	0.0004	<0.0002	<0.0002	0.0004	0.0004	0.0004	-	-	<0.0002	<0.0002	-	<0.0002
Mary Creek	Pathway	0021_SD036	0021_SD036_221011	11 Oct 2022	ES2237106	0.0137	0.0014	<0.0002	0.0161	0.0151	0.0151	-	-	<0.0002	0.0010	-	<0.0002
Mary Creek	Pathway	0021_SD036	0021_SD036_230418	18 Apr 2023	ES2313364	0.0018	0.0003	<0.0002	0.0021	0.0021	0.0021	-	-	<0.0002	<0.0002	-	<0.0002
Mary Creek	Pathway	0021_SD036	0021_SD036_231017	17 Oct 2023	ES2336399	0.0014	0.0002	<0.0002	0.0016	0.0016	0.0016	-	-	<0.0002	<0.0002	-	<0.0002
Mary Creek	Pathway	0021_SD036	0021_SD036_240409	09 Apr 2024	ES2411995	0.446	0.0153	0.0012	0.484	0.461	0.467	-	-	0.0003	0.0109	-	0.0040
Mary Creek	Pathway	0021_SD036	0021_SD036_241028	28 Oct 2024	ES2435541	0.0040	0.0006	<0.0002	0.0049	0.0046	0.0046	-	-	<0.0002	0.0003	-	<0.0002
Mary Creek	Pathway	0021_SD036	0021_SD036_250401	01 Apr 2025	ES2510622	<0.0002	0.0004	<0.0002	0.0004	0.0004	0.0004	-	-	<0.0002	<0.0002	-	<0.0002
Mary Creek	Pathway	0021_SD036	0021_SD036_251021	21 Oct 2025	ES2533521	0.0015	<0.0002	<0.0002	0.0015	0.0015	0.0015	-	-	<0.0002	<0.0002	-	<0.0002
Mary Creek	Pathway	0021_SD037	MC_SD03_0.0_180323	23 Mar 2018	ES1809241	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	-	<0.0002	<0.0002	-	<0.0002
Mary Creek	Pathway	0021_SD037	MC_SD03_0.0_180501	05 May 2018	ES1812871	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	-	<0.0002	<0.0002	-	<0.0002
Mary Creek	Pathway	0021_SD037	0021_SD037_221011	11 Oct 2022	ES2237106	0.0006	<0.0002	<0.0002	0.0006	0.0006	0.0006	-	-	<0.0002	<0.0002	-	<0.0002
Mary Creek	Pathway	0021_SD037	0021_SD037_230418	18 Apr 2023	ES2313364	0.0010	<0.0002	<0.0002	0.0010	0.0010	0.0010	-	-	<0.0002	<0.0002	-	<0.0002
Mary Creek	Pathway	0021_SD037	0021_SD037_231017	17 Oct 2023	ES2336399	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	-	<0.0002	<0.0002	-	<0.0002
Mary Creek	Pathway	0021_SD037	0021_SD037_240409	09 Apr 2024	ES2411995	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	-	<0.0002	<0.0002	-	<0.0002
Mary Creek	Pathway	0021_SD037	0021_SD037_241023	23 Oct 2024	ES2435078	0.0005	<0.0002	<0.0002	0.0005	0.0005	0.0005	-	-	<0.0002	<0.0002	-	<0.0002
Mary Creek	Pathway	0021_SD037	0021_SD037_250401	01 Apr 2025	ES2510622	0.0004	<0.0002	<0.0002	0.0004	0.0004	0.0004	-	-	<0.0002	<0.0002	-	<0.0002
Mary Creek	Pathway	0021_SD037	0021_SD037_251021	21 Oct 2025	ES2533521	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	-	<0.0002	<0.0002	-	<0.0002
Mary Creek	Pathway	0021_SD040	MC_QC110_180328	28 Mar 2018	ES1809328	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	-	<0.0002	<0.0002	-	<0.0002
Mary Creek	Pathway	0021_SD040	MC_SD06_0.0_180405	05 Apr 2018	ES1810551	0.0044	0.0023	<0.0002	0.0069	0.0067	0.0067	-	-	<0.0002	<0.0002	-	0.0002
Mary Creek	Pathway	0021_SD040	0021_SD040_221012	12 Oct 2022	ES2237106	0.0022	0.0002	<0.0002	0.0024	0.0024	0.0024	-	-	<0.0002	<0.0002	-	<0.0002
Mary Creek	Pathway	0021_SD040	0021_SD040_230419	19 Apr 2023	ES2313364	0.0005	<0.0002	<0.0002	0.0005	0.0005	0.0005	-	-	<0.0002	<0.0002	-	<0.0002
Mary Creek	Pathway	0021_SD040	0021_SD040_231017	18 Oct 2023	ES2336399	0.0003	<0.0002	<0.0002	0.0003	0.0003	0.0003	-	-	<0.0002	<0.0002	-	<0.0002
Mary Creek	Pathway	0021_SD040	0021_SD040_240410	10 Apr 2024	ES2411995	0.0106	0.0008	<0.0002	0.0120	0.0114	0.0114	-	-	<0.0002	0.0004	-	<0.0002
Mary Creek	Pathway	0021_SD040	0021_SD040_241025	25 Oct 2024	ES2435541	0.0047	0.0008	<0.0002	0.0055	0.0055	0.0055	-	-	<0.0002	<0.0002	-	<0.0002
Mary Creek	Pathway	0021_SD040	0021_SD040_250403	03 Apr 2025	ES2510622	0.0023	0.0018	<0.0002	0.0041	0.0041	0.0041	-	-	<0.0002	<0.0002	-	<0.0002
Mary Creek	Pathway	0021_SD040	0021_SD040_251021	21 Oct 2025	ES2533521	0.0017	0.0006	<0.0002	0.0023	0.0023	0.0023	-	-	<0.0002	<0.0002	-	<0.0002



Appendix B
Table B6a
Historical Sediment Analytical Results - Captains Lagoon, Flatrock Creek, Mary Creek

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acid			
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Sum of US EPA PFAS (PFOS + PFOA)*	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecane sulfonic acid (PFDS)	Perfluorononane sulfonate (PFNS)	Perfluorooheptane sulfonic acid (PFHpS)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.005	0.0001	0.0002	0.0002	0.0001

Catchment	SPR	Location	Field ID	Date	Lab Report No.												
Mary Creek	Receptor	0021_SD035	MC_SD01_0.0_180320	20 Mar 2018	ES1808818	0.0003	<0.0002	<0.0002	0.0003	0.0003	0.0003	-	-	<0.0002	<0.0002	-	<0.0002
Mary Creek	Receptor	0021_SD035	MC_SD01_0.3_180320	20 Mar 2018	ES1814922	0.0007	<0.0002	<0.0002	-	0.0007	0.0007	-	-	<0.0002	-	-	-
Mary Creek	Receptor	0021_SD035	MC_SD01_0.0_180501	01 May 2018	ES1812871	0.0011	0.0005	<0.0002	0.0016	0.0016	0.0016	-	-	<0.0002	<0.0002	-	<0.0002
Mary Creek	Receptor	0021_SD035	0021_SD035_221012	12 Oct 2022	ES2237106	0.0574	0.0034	<0.0002	0.0608	0.0608	0.0608	-	-	<0.0002	<0.0002	-	<0.0002
Mary Creek	Receptor	0021_SD035	0021_SD035_230418	18 Apr 2023	ES2313364	0.0002	<0.0002	<0.0002	0.0002	0.0002	0.0002	-	-	<0.0002	<0.0002	-	<0.0002
Mary Creek	Receptor	0021_SD035	0021_SD035_231017	17 Oct 2023	ES2336399	0.0014	<0.0002	<0.0002	0.0014	0.0014	0.0014	-	-	<0.0002	<0.0002	-	<0.0002
Mary Creek	Receptor	0021_SD035	0021_SD035_240409	09 Apr 2024	ES2411995	0.0322	0.0044	<0.0002	0.0386	0.0366	0.0366	-	-	<0.0002	0.0011	-	0.0005
Mary Creek	Receptor	0021_SD035	0021_SD035_241023	23 Oct 2024	ES2435078	0.0401	0.0018	0.0003	0.0491	0.0419	0.0442	-	-	<0.0002	0.0032	-	<0.0002
Mary Creek	Receptor	0021_SD035	0021_SD035_250129	29 Jan 2025	ES2503552	0.0028	0.0003	<0.0002	0.0031	0.0031	0.0031	-	-	<0.0002	<0.0002	-	<0.0002
Mary Creek	Receptor	0021_SD035	0021_SD035_250401	01 Apr 2025	ES2510622	0.0004	<0.0002	<0.0002	0.0004	0.0004	0.0004	-	-	<0.0002	<0.0002	-	<0.0002
Mary Creek	Receptor	0021_SD035	0021_SD035_251021	21 Oct 2025	ES2533521	0.0076	0.0010	<0.0002	0.0086	0.0086	0.0086	-	-	<0.0002	<0.0002	-	<0.0002
Mary Creek	Receptor	0021_SD044	MC_SD10_0.0_180320	20 Mar 2018	ES1808818	0.0006	<0.0002	<0.0002	0.0006	0.0006	0.0006	-	-	<0.0002	<0.0002	-	<0.0002
Mary Creek	Receptor	0021_SD044	MC_SD10_0.3_180320	20 Mar 2018	ES1814922	0.0002	<0.0002	<0.0002	-	0.0002	0.0002	-	-	<0.0002	-	-	-
Mary Creek	Receptor	0021_SD044	MC_SD10_0.0_180328	28 Mar 2018	ES1814922	<0.0002	<0.0002	<0.0002	-	<0.0002	<0.0002	-	-	<0.0002	-	-	-
Mary Creek	Receptor	0021_SD044	MC_SD10_0.2_180328	28 Mar 2018	ES1814922	<0.0002	<0.0002	<0.0002	-	<0.0002	<0.0002	-	-	<0.0002	-	-	-
Mary Creek	Receptor	0021_SD044	0021_SD044_221012	12 Oct 2022	ES2237106	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	-	<0.0002	<0.0002	-	<0.0002
Mary Creek	Receptor	0021_SD044	0021_SD044_230418	18 Apr 2023	ES2313364	0.0003	<0.0002	<0.0002	0.0003	0.0003	0.0003	-	-	<0.0002	<0.0002	-	<0.0002
Mary Creek	Receptor	0021_SD044	0021_QC106_231017	17 Oct 2023	ES2336399	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	-	<0.0002	<0.0002	-	<0.0002
Mary Creek	Receptor	0021_SD044	0021_QC206_231017	17 Oct 2023	335876	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	-	<0.0001	-	<0.0001	<0.0002	-	<0.0001
Mary Creek	Receptor	0021_SD044	0021_SD044_231017	17 Oct 2023	ES2336399	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	-	<0.0002	<0.0002	-	<0.0002
Mary Creek	Receptor	0021_SD044	0021_SD044_240409	09 Apr 2024	ES2411995	0.0002	<0.0002	<0.0002	0.0002	0.0002	0.0002	-	-	<0.0002	<0.0002	-	<0.0002
Mary Creek	Receptor	0021_SD044	0021_QC107_241023	23 Oct 2024	ES2435078	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	-	<0.0002	<0.0002	-	<0.0002
Mary Creek	Receptor	0021_SD044	0021_QC207_241023	23 Oct 2024	1154751	<0.005	<0.005	<0.005	<0.05	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Mary Creek	Receptor	0021_SD044	0021_SD044_241023	23 Oct 2024	ES2435078	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	-	<0.0002	<0.0002	-	<0.0002
Mary Creek	Receptor	0021_SD044	0021_SD044_250129	29 Jan 2025	ES2503552	0.0003	0.0002	<0.0002	0.0005	0.0005	0.0005	-	-	<0.0002	<0.0002	-	<0.0002
Mary Creek	Receptor	0021_SD044	0021_QC104_250401	01 Apr 2025	ES2510113	0.0005	<0.0002	<0.0002	0.0005	0.0005	0.0005	-	-	<0.0002	<0.0002	-	<0.0002
Mary Creek	Receptor	0021_SD044	0021_QC204_250401	01 Apr 2025	1210052	<0.005	<0.005	<0.005	<0.05	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Mary Creek	Receptor	0021_SD044	0021_SD044_250401	01 Apr 2025	ES2510622	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	-	<0.0002	<0.0002	-	<0.0002
Mary Creek	Receptor	0021_SD044	0021_SD044_251021	21 Oct 2025	ES2533521	0.0003	<0.0002	<0.0002	0.0003	0.0003	0.0003	-	-	<0.0002	<0.0002	-	<0.0002

Comments
#1 Reported Analyte LOR is higher than Requested Analyte LOR
#2 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.



Appendix B
Table B6a
Historical Sediment Analytical Results - Captains Lagoon, Flatrock Creek, Mary Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	s		PFAS - Perfluoroalkyl Carboxylic Acids									
	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTriDA)	Perfluoroundecanoic acid (PFUnDA)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.0005	0.0001	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001	0.0002	0.0005	0.0002	0.0002

Catchment	SPR	Location	Field ID	Date	Lab Report No.											
Captains Lagoon	Pathway	0021_SD009	CL_SED09_0-0.05	18 Apr 2017	ES1709535	-	<0.0002	0.001	<0.0002	<0.0002	<0.0002	0.0007	<0.0002	0.0005	<0.0005	<0.0002
Captains Lagoon	Pathway	0021_SD009	0021_SD009_211020	20 Oct 2021	ES2138639	-	0.0002	<0.001	0.0002	0.0004	<0.0002	0.0006	<0.0002	0.0004	<0.0005	0.0005
Captains Lagoon	Pathway	0021_SD009	0021_SD009_221010	10 Oct 2022	ES2237106	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	0.0010	<0.0002	0.0010	<0.0005	<0.0002
Captains Lagoon	Pathway	0021_SD009	0021_SD009_230417	17 Apr 2023	ES2313364	-	0.0006	<0.001	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Captains Lagoon	Pathway	0021_SD009	0021_SD009_231016	16 Oct 2023	ES2336399	-	<0.0005 ^{#1}	<0.002 ^{#1}	<0.0005 ^{#1}	<0.0005 ^{#1}	<0.0005 ^{#1}	<0.0005 ^{#1}	<0.0005 ^{#1}	<0.0005 ^{#1}	<0.0012 ^{#1}	<0.0005 ^{#1}
Captains Lagoon	Pathway	0021_SD009	0021_SD009_240410	10 Apr 2024	ES2411995	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Captains Lagoon	Pathway	0021_SD009	0021_SD009_241022	22 Oct 2024	ES2435078	-	<0.0025 ^{#1}	<0.012 ^{#1}	<0.0025 ^{#1}	<0.0025 ^{#1}	<0.0025 ^{#1}	<0.0025 ^{#1}	<0.0025 ^{#1}	<0.0025 ^{#1}	<0.0062 ^{#1}	<0.0025 ^{#1}
Captains Lagoon	Pathway	0021_SD009	0021_SD009_250401	01 Apr 2025	ES2510622	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Captains Lagoon	Pathway	0021_SD009	0021_SD009_251023	23 Oct 2025	ES2533521	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Captains Lagoon	Pathway	0021_SD011	CL_SED11_0-0.05	20 Apr 2017	ES1709644	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Captains Lagoon	Pathway	0021_SD011	JCQA05	20 Apr 2017	ES1709644	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Captains Lagoon	Pathway	0021_SD011	0021_SD011_241026	26 Oct 2024	ES2435541	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Captains Lagoon	Pathway	0021_SD011	0021_SD011_250401	01 Apr 2025	ES2510622	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Captains Lagoon	Pathway	0021_SD011	0021_SD011_251022	22 Oct 2025	ES2533521	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Captains Lagoon	Receptor	0020_SD019	CL_SED02_0-0.05	18 Apr 2017	ES1709535	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Captains Lagoon	Receptor	0020_SD019	CL_SD02_0.0_180501	01 May 2018	ES1812871	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Captains Lagoon	Receptor	0020_SD019	0020_QC201_211018	18 Oct 2021	281319	-	<0.0001	<0.0002	<0.0005	<0.0005	<0.0001	<0.0001	<0.0001	<0.0002	<0.005	<0.0005
Captains Lagoon	Receptor	0020_SD019	0020_SD019_211018	18 Oct 2021	ES2138638	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Captains Lagoon	Receptor	0020_SD019	0020_SD019_220404	04 Apr 2022	ES2212597	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Captains Lagoon	Receptor	0020_SD019	0020_SD019_221011	11 Oct 2022	ES2237104	-	<0.0002	<0.001	<0.0002	0.0007	<0.0002	0.0010	<0.0002	0.0016	<0.0005	0.0002
Captains Lagoon	Receptor	0020_SD019	0020_SD019_230417	17 Apr 2023	ES2313254	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	0.0002
Captains Lagoon	Receptor	0020_SD019	0020_SD019_231016	16 Oct 2023	ES2336397	-	0.0011	<0.005 ^{#1}	<0.0010 ^{#1}	<0.0010 ^{#1}	<0.0010 ^{#1}	0.0016	<0.0010 ^{#1}	<0.0010 ^{#1}	<0.0025 ^{#1}	<0.0010 ^{#1}
Captains Lagoon	Receptor	0020_SD019	0020_QC103_240408	08 Apr 2024	ES2411964	-	<0.0002	<0.001	<0.0002	0.0003	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	0.0004
Captains Lagoon	Receptor	0020_SD019	0020_QC203_240408	08 Apr 2024	348827	-	<0.0001	<0.0002	<0.0005	<0.0005	<0.0001	0.0001	<0.0001	<0.0002	<0.005	<0.0005
Captains Lagoon	Receptor	0020_SD019	0020_SD019_240408	08 Apr 2024	ES2411964	-	<0.0002	<0.001	0.0002	0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	0.0002
Captains Lagoon	Receptor	0020_SD019	0020_SD019_241025	25 Oct 2024	ES2435539	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Captains Lagoon	Receptor	0020_SD019	0020_SD019_250331	31 Mar 2025	ES2510618	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Captains Lagoon	Receptor	0020_SD019	0020_SD019_251020	20 Oct 2025	ES2533546	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Captains Lagoon	Receptor	0020_SD024	CL_SED07_0-0.05	18 Apr 2017	ES1709535	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Captains Lagoon	Receptor	0020_SD024	CL_QC220_180501	01 May 2018	597346	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Captains Lagoon	Receptor	0020_SD024	CL_SD07_0.0_180501	01 May 2018	ES1812871	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Captains Lagoon	Receptor	0020_SD024	0020_SD024_211018	18 Oct 2021	ES2138638	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Captains Lagoon	Receptor	0020_SD024	0020_SD024_220404	04 Apr 2022	ES2212597	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Captains Lagoon	Receptor	0020_SD024	0020_SD024_221012	10 Oct 2022	ES2236866	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Captains Lagoon	Receptor	0020_SD024	0020_SD024_221012	12 Oct 2022	ES2237104	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Captains Lagoon	Receptor	0020_SD024	0020_QC140_230130	30 Jan 2023	ES2303447	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Captains Lagoon	Receptor	0020_SD024	0020_SD024_230130	30 Jan 2023	ES2303447	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Captains Lagoon	Receptor	0020_SD024	0020_SD024_230417	17 Apr 2023	ES2313254	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Captains Lagoon	Receptor	0020_SD024	0020_SD024_231016	16 Oct 2023	ES2336397	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Captains Lagoon	Receptor	0020_SD024	0020_SD024_240408	08 Apr 2024	ES2411964	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Captains Lagoon	Receptor	0020_SD024	0020_QC111_241025	25 Oct 2024	ES2435539	-	<0.0002	<0.001	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Captains Lagoon	Receptor	0020_SD024	0020_QC211_241025	25 Oct 2024	1156671	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Captains Lagoon	Receptor	0020_SD024	0020_SD024_241025	25 Oct 2024	ES2435539	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0006 ^{#1}	0.0003
Captains Lagoon	Receptor	0020_SD024	0020_SD024_250331	31 Mar 2025	ES2510618	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Captains Lagoon	Receptor	0020_SD024	0020_QC101_251020	20 Oct 2025	ES2533546	-	<0.0002	<0.001	0.0006	<0.0002	<0.0002	0.0004	<0.0002	<0.0002	<0.0006 ^{#1}	0.0011
Captains Lagoon	Receptor	0020_SD024	0020_QC201_251020	20 Oct 2025	1285219	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Captains Lagoon	Receptor	0020_SD024	0020_SD024_251020	20 Oct 2025	ES2533546	-	<0.0002	<0.001	0.0004	<0.0002	<0.0002	0.0003	<0.0002	<0.0002	<0.0005	0.0005



Appendix B
Table B6a
Historical Sediment Analytical Results - Captains Lagoon, Flatrock Creek, Mary Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	s		PFAS - Perfluoroalkyl Carboxylic Acids									
	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnDA)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.0005	0.0001	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001	0.0002	0.0005	0.0002	0.0002

Catchment	SPR	Location	Field ID	Date	Lab Report No.												
Flatrock Creek	Pathway	0021_SD018	FC_SED06_0.0-0.1	19 Apr 2017	ES1709535	-	0.0003	<0.001	<0.0002	<0.0002	<0.0002	0.0003	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
Flatrock Creek	Pathway	0021_SD018	0021_QC209_211020	20 Oct 2021	281322	-	<0.001	0.0065	<0.005	<0.005	<0.001	0.0062	<0.001	0.0059	<0.05	<0.005	<0.005
Flatrock Creek	Pathway	0021_SD018	0021_SD018_211020	20 Oct 2021	ES2138639	-	0.0007	<0.001	<0.0002	<0.0002	0.0003	0.0026	<0.0002	0.0020	<0.0005	<0.0002	<0.0002
Flatrock Creek	Pathway	0021_SD018	0021_QC111_220407	07 Apr 2022	ES2212442	-	0.0005	<0.001	<0.0002	<0.0002	0.0002	0.0021	<0.0002	0.0007	<0.0005	<0.0002	<0.0002
Flatrock Creek	Pathway	0021_SD018	0021_QC211_220407	07 Apr 2022	293031	-	<0.0003	<0.0006	<0.002	<0.002	<0.0003	0.0005	<0.0003	<0.0006	<0.02	<0.002	<0.002
Flatrock Creek	Pathway	0021_SD018	0021_SD018_220407	07 Apr 2022	ES2212442	-	0.0002	<0.001	<0.0002	<0.0002	<0.0002	0.0010	<0.0002	0.0003	<0.0005	<0.0002	<0.0002
Flatrock Creek	Pathway	0021_SD018	0021_SD018_221012	12 Oct 2022	ES2237106	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
Flatrock Creek	Pathway	0021_SD018	0021_SD018_230419	19 Apr 2023	ES2313364	-	0.0004	<0.001	0.0002	<0.0002	<0.0002	0.0012	<0.0002	0.0002	<0.0005	<0.0002	<0.0002
Flatrock Creek	Pathway	0021_SD018	0021_SD018_231018	18 Oct 2023	ES2336399	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
Flatrock Creek	Pathway	0021_SD018	0021_SD018_240410	10 Apr 2024	ES2411995	-	0.0004	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
Flatrock Creek	Pathway	0021_SD018	0021_SD018_241026	26 Oct 2024	ES2435541	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
Flatrock Creek	Pathway	0021_SD018	0021_SD018_250403	03 Apr 2025	ES2510622	-	0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
Flatrock Creek	Pathway	0021_SD018	0021_QC126_251022	22 Oct 2025	ES2533538	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0006 ^{#1}	<0.0002	<0.0002
Flatrock Creek	Pathway	0021_SD018	0021_QC226_251022	22 Oct 2025	1285374	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Flatrock Creek	Pathway	0021_SD018	0021_SD018_251022	22 Oct 2025	ES2533521	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0006 ^{#1}	<0.0002	<0.0002
Flatrock Creek	Pathway	0021_SD021	AB_SED09_0.0-0.05	20 Apr 2017	ES1709644	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
Flatrock Creek	Pathway	0021_SD021	0021_SD021_211026	26 Oct 2021	ES2138639	-	<0.0002	<0.001	0.0002	<0.0002	<0.0002	0.0005	<0.0002	<0.0002	<0.0005	<0.0002	0.0003
Flatrock Creek	Pathway	0021_SD021	0021_SD021_220407	07 Apr 2022	ES2212442	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	0.0004	<0.0002	<0.0002	<0.0005	<0.0002	0.0002
Flatrock Creek	Pathway	0021_SD021	0021_SD021_221013	13 Oct 2022	ES2237106	-	<0.0002	<0.001	0.0004	<0.0002	<0.0002	0.0005	<0.0002	0.0002	<0.0005	<0.0002	0.0007
Flatrock Creek	Pathway	0021_SD021	0021_QC102_230419	19 Apr 2023	ES2313364	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0005	<0.0002	0.0002
Flatrock Creek	Pathway	0021_SD021	0021_QC202_230419	19 Apr 2023	321517	-	<0.0001	0.0002	<0.0005	<0.0005	0.0001	0.0004	<0.0001	<0.0002	<0.005	<0.0005	<0.0005
Flatrock Creek	Pathway	0021_SD021	0021_SD021_230419	19 Apr 2023	ES2313364	-	<0.0002	<0.001	0.0003	<0.0002	<0.0002	0.0004	<0.0002	<0.0002	<0.0005	<0.0002	0.0004
Flatrock Creek	Pathway	0021_SD021	0021_SD021_231018	18 Oct 2023	ES2336399	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
Flatrock Creek	Pathway	0021_SD021	0021_SD021_240410	10 Apr 2024	ES2411995	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
Flatrock Creek	Pathway	0021_SD021	0021_SD021_241023	23 Oct 2024	ES2435078	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	0.0004	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
Flatrock Creek	Pathway	0021_SD021	0021_SD021_250404	04 Apr 2025	ES2510622	-	0.0002	<0.001	0.0002	<0.0002	0.0003	0.0016	<0.0002	0.0007	<0.0005	<0.0002	0.0005
Flatrock Creek	Pathway	0021_SD021	0021_SD021_251021	21 Oct 2025	ES2533521	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
Flatrock Creek	Receptor	0020_SD002	FC_SED02_0.0-0.05	19 Apr 2017	ES1709535	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
Flatrock Creek	Receptor	0020_SD002	FC_SED02_0.0_180515	15 May 2018	ES1814324	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
Flatrock Creek	Receptor	0020_SD002	0020_QC203_211019	19 Oct 2021	281319	-	<0.0001	<0.0002	<0.0005	<0.0005	<0.0001	<0.0001	<0.0001	<0.0002	<0.005	<0.0005	<0.0005
Flatrock Creek	Receptor	0020_SD002	0020_SD002_211019	19 Oct 2021	ES2138638	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
Flatrock Creek	Receptor	0020_SD002	0020_QC101_220404	04 Apr 2022	ES2212597	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
Flatrock Creek	Receptor	0020_SD002	0020_SD002_220404	04 Apr 2022	ES2212597	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
Flatrock Creek	Receptor	0020_SD002	0020_SD002_221010	10 Oct 2022	ES2237104	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
Flatrock Creek	Receptor	0020_SD002	0020_SD002_230417	17 Apr 2023	ES2313254	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
Flatrock Creek	Receptor	0020_SD002	0020_SD002_231016	16 Oct 2023	ES2336397	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
Flatrock Creek	Receptor	0020_SD002	0020_SD002_240408	08 Apr 2024	ES2411964	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
Flatrock Creek	Receptor	0020_SD002	0020_SD002_241025	25 Oct 2024	ES2435539	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
Flatrock Creek	Receptor	0020_SD002	0020_QC252_250401	01 Apr 2025	1209674	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Flatrock Creek	Receptor	0020_SD002	0020_SD002_250401	01 Apr 2025	ES2510618	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
Flatrock Creek	Receptor	0020_SD002	0020_SD002_251020	20 Oct 2025	ES2533546	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
Flatrock Creek	Receptor	0020_SD004	FC_SED04_0.0-0.05	19 Apr 2017	ES1709535	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
Flatrock Creek	Receptor	0020_SD004	FC_SED04_0.0_180515	15 May 2018	ES1814324	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
Flatrock Creek	Receptor	0020_SD004	FC_SED04_0.2_180515	15 May 2018	ES1814324	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
Flatrock Creek	Receptor	0020_SD004	0020_SD004_211018	18 Oct 2021	ES2138638	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
Flatrock Creek	Receptor	0020_SD004	0020_SD004_220404	04 Apr 2022	ES2212597	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
Flatrock Creek	Receptor	0020_SD004	0020_SD004_221010	10 Oct 2022	ES2237104	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002



Appendix B
Table B6a
Historical Sediment Analytical Results - Captains Lagoon, Flatrock Creek, Mary Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	Is	PFAS - Perfluoroalkyl Carboxylic Acids											
		Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnDA)
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.0005	0.0001	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001	0.0002	0.0005	0.0002	0.0002	

Catchment	SPR	Location	Field ID	Date	Lab Report No.											
Flatrock Creek	Receptor	0020_SD004	0020_SD004_230417	17 Apr 2023	ES2313254	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Flatrock Creek	Receptor	0020_SD004	0020_SD004_231016	16 Oct 2023	ES2336397	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Flatrock Creek	Receptor	0020_SD004	0020_SD004_240408	08 Apr 2024	ES2411964	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Flatrock Creek	Receptor	0020_SD004	0020_QC150_241021	21 Oct 2024	ES2435143	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Flatrock Creek	Receptor	0020_SD004	0020_SD004_241021	21 Oct 2024	ES2435143	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Flatrock Creek	Receptor	0020_SD004	0020_QC151_250331	31 Mar 2025	ES2510618	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Flatrock Creek	Receptor	0020_SD004	0020_SD004_250331	31 Mar 2025	ES2510618	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Flatrock Creek	Receptor	0020_SD004	0020_SD004_251020	20 Oct 2025	ES2533546	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Pathway	0021_SD006	B_SED01_0.3-0.4	12 Apr 2017	ES1709064	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Pathway	0021_SD006	0021_SD006_211020	20 Oct 2021	ES2138639	-	0.0032	0.002	<0.0002	0.0006	0.0008	0.0049	<0.0002	0.0027	<0.0006 ^{#1}	0.0002
Mary Creek	Pathway	0021_SD006	0021_SD006_221012	12 Oct 2022	ES2237106	-	0.0022	<0.001	<0.0002	<0.0002	<0.0002	0.0036	<0.0002	0.0013	<0.0006 ^{#1}	<0.0002
Mary Creek	Pathway	0021_SD006	0021_SD006_230419	19 Apr 2023	ES2313364	-	0.0003	<0.001	<0.0002	<0.0002	<0.0002	0.0015	<0.0002	<0.0002	<0.0006 ^{#1}	<0.0002
Mary Creek	Pathway	0021_SD006	0021_SD006_231018	18 Oct 2023	ES2336399	-	0.0039	<0.002 ^{#1}	<0.0005 ^{#1}	<0.0005 ^{#1}	0.0018	0.0222	<0.0005 ^{#1}	0.0092	<0.0012 ^{#1}	<0.0005 ^{#1}
Mary Creek	Pathway	0021_SD006	0021_SD006_240410	10 Apr 2024	ES2411995	-	0.0006	0.003	<0.0002	0.0004	0.0004	0.0018	<0.0002	0.0014	<0.0006 ^{#1}	<0.0002
Mary Creek	Pathway	0021_SD006	0021_SD006_241025	25 Oct 2024	ES2435541	-	0.0024	0.003	<0.0002	0.0004	0.0007	0.0055	0.0003	0.0024	<0.0006 ^{#1}	0.0003
Mary Creek	Pathway	0021_SD006	0021_SD006_250130	30 Jan 2025	ES2503552	-	0.0034	<0.001	0.0003	0.0004	0.0005	0.0008	0.0002	<0.0002	<0.0005	0.0006
Mary Creek	Pathway	0021_SD006	0021_SD006_250404	04 Apr 2025	ES2510622	-	0.0005	<0.001	<0.0002	<0.0002	0.0006	0.0028	0.0004	0.0016	<0.0006 ^{#1}	0.0003
Mary Creek	Pathway	0021_SD006	0021_SD006_250805	05 Aug 2025	ES2524252	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Pathway	0021_SD006	0021_SD006_250825	25 Aug 2025	ES2526742	<0.0005	0.0011	<0.001	<0.0002	<0.0002	0.0002	0.0008	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Pathway	0021_SD006	0021_SD006_250912	12 Sep 2025	ES2528885	-	0.0004	<0.001	<0.0002	<0.0002	0.0002	0.0004	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Pathway	0021_SD036	MC_SD02_0.0_180323	23 Mar 2018	ES1809241	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Pathway	0021_SD036	0021_SD036_221011	11 Oct 2022	ES2237106	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Pathway	0021_SD036	0021_SD036_230418	18 Apr 2023	ES2313364	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Pathway	0021_SD036	0021_SD036_231017	17 Oct 2023	ES2336399	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Pathway	0021_SD036	0021_SD036_240409	09 Apr 2024	ES2411995	-	0.0003	0.001	<0.0002	<0.0002	<0.0002	0.0020	<0.0002	0.0009	<0.0005	0.0003
Mary Creek	Pathway	0021_SD036	0021_SD036_241028	28 Oct 2024	ES2435541	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Pathway	0021_SD036	0021_SD036_250401	01 Apr 2025	ES2510622	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Pathway	0021_SD036	0021_SD036_251021	21 Oct 2025	ES2533521	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Pathway	0021_SD037	MC_SD03_0.0_180323	23 Mar 2018	ES1809241	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Pathway	0021_SD037	MC_SD03_0.0_180501	05 May 2018	ES1812871	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Pathway	0021_SD037	0021_SD037_221011	11 Oct 2022	ES2237106	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Pathway	0021_SD037	0021_SD037_230418	18 Apr 2023	ES2313364	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Pathway	0021_SD037	0021_SD037_231017	17 Oct 2023	ES2336399	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Pathway	0021_SD037	0021_SD037_240409	09 Apr 2024	ES2411995	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Pathway	0021_SD037	0021_SD037_241023	23 Oct 2024	ES2435078	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Pathway	0021_SD037	0021_SD037_250401	01 Apr 2025	ES2510622	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Pathway	0021_SD037	0021_SD037_251021	21 Oct 2025	ES2533521	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Pathway	0021_SD040	MC_QC110_180328	28 Mar 2018	ES1809328	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Pathway	0021_SD040	MC_SD06_0.0_180405	05 Apr 2018	ES1810551	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Pathway	0021_SD040	0021_SD040_221012	12 Oct 2022	ES2237106	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Pathway	0021_SD040	0021_SD040_230419	19 Apr 2023	ES2313364	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Pathway	0021_SD040	0021_SD040_231017	18 Oct 2023	ES2336399	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Pathway	0021_SD040	0021_SD040_240410	10 Apr 2024	ES2411995	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Pathway	0021_SD040	0021_SD040_241025	25 Oct 2024	ES2435541	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Pathway	0021_SD040	0021_SD040_250403	03 Apr 2025	ES2510622	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Pathway	0021_SD040	0021_SD040_251021	21 Oct 2025	ES2533521	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002



Appendix B
Table B6a
Historical Sediment Analytical Results - Captains Lagoon, Flatrock Creek, Mary Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Carboxylic Acids											
	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnDA)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.0005	0.0001	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001	0.0002	0.0005	0.0002	0.0002

Catchment	SPR	Location	Field ID	Date	Lab Report No.											
Mary Creek	Receptor	0021_SD035	MC_SD01_0.0_180320	20 Mar 2018	ES1808818	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Receptor	0021_SD035	MC_SD01_0.3_180320	20 Mar 2018	ES1814922	-	-	<0.001	-	-	<0.0002	<0.0002	-	<0.0002	-	-
Mary Creek	Receptor	0021_SD035	MC_SD01_0.0_180501	01 May 2018	ES1812871	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Receptor	0021_SD035	0021_SD035_221012	12 Oct 2022	ES2237106	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0006 ^{#1}	<0.0002
Mary Creek	Receptor	0021_SD035	0021_SD035_230418	18 Apr 2023	ES2313364	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Receptor	0021_SD035	0021_SD035_231017	17 Oct 2023	ES2336399	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Receptor	0021_SD035	0021_SD035_240409	09 Apr 2024	ES2411995	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Receptor	0021_SD035	0021_SD035_241023	23 Oct 2024	ES2435078	-	<0.0002	0.002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0006 ^{#1}	0.0003
Mary Creek	Receptor	0021_SD035	0021_SD035_250129	29 Jan 2025	ES2503552	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Receptor	0021_SD035	0021_SD035_250401	01 Apr 2025	ES2510622	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Receptor	0021_SD035	0021_SD035_251021	21 Oct 2025	ES2533521	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Receptor	0021_SD044	MC_SD10_0.0_180320	20 Mar 2018	ES1808818	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Receptor	0021_SD044	MC_SD10_0.3_180320	20 Mar 2018	ES1814922	-	-	<0.001	-	-	<0.0002	<0.0002	-	<0.0002	-	-
Mary Creek	Receptor	0021_SD044	MC_SD10_0.0_180328	28 Mar 2018	ES1814922	-	-	<0.001	-	-	<0.0002	<0.0002	-	<0.0002	-	-
Mary Creek	Receptor	0021_SD044	MC_SD10_0.2_180328	28 Mar 2018	ES1814922	-	-	<0.001	-	-	<0.0002	<0.0002	-	<0.0002	-	-
Mary Creek	Receptor	0021_SD044	0021_SD044_221012	12 Oct 2022	ES2237106	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Receptor	0021_SD044	0021_SD044_230418	18 Apr 2023	ES2313364	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Receptor	0021_SD044	0021_QC106_231017	17 Oct 2023	ES2336399	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Receptor	0021_SD044	0021_QC206_231017	17 Oct 2023	335876	-	<0.0001	<0.0002	<0.0005	<0.0005	<0.0001	<0.0001	<0.0002	<0.0002	<0.005	<0.0005
Mary Creek	Receptor	0021_SD044	0021_SD044_231017	17 Oct 2023	ES2336399	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Receptor	0021_SD044	0021_SD044_240409	09 Apr 2024	ES2411995	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Receptor	0021_SD044	0021_QC107_241023	23 Oct 2024	ES2435078	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Receptor	0021_SD044	0021_QC207_241023	23 Oct 2024	1154751	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Mary Creek	Receptor	0021_SD044	0021_SD044_241023	23 Oct 2024	ES2435078	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Receptor	0021_SD044	0021_SD044_250129	29 Jan 2025	ES2503552	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Receptor	0021_SD044	0021_QC104_250401	01 Apr 2025	ES2510113	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Receptor	0021_SD044	0021_QC204_250401	01 Apr 2025	1210052	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Mary Creek	Receptor	0021_SD044	0021_SD044_250401	01 Apr 2025	ES2510622	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Mary Creek	Receptor	0021_SD044	0021_SD044_251021	21 Oct 2025	ES2533521	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002

Comments
#1 Reported Analyte LOR is higher than Requested Analyte LOR
#2 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.



Appendix B
Table B6a
Historical Sediment Analytical Results - Captains Lagoon, Flatrock Creek, Mary Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

EQ	PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
	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)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
	0.0005	0.0002	0.0005	0.0005	0.0002	0.0005	0.0002	0.0001	0.0001	0.0002	0.0002

Catchment	SPR	Location	Field ID	Date	Lab Report No.											
Captains Lagoon	Pathway	0021_SD009	CL_SED09_0-0.05	18 Apr 2017	ES1709535	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Captains Lagoon	Pathway	0021_SD009	0021_SD009_211020	20 Oct 2021	ES2138639	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Captains Lagoon	Pathway	0021_SD009	0021_SD009_221010	10 Oct 2022	ES2237106	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Captains Lagoon	Pathway	0021_SD009	0021_SD009_230417	17 Apr 2023	ES2313364	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Captains Lagoon	Pathway	0021_SD009	0021_SD009_231016	16 Oct 2023	ES2336399	<0.0012 ^{#1}	<0.0005 ^{#1}	<0.0012 ^{#1}	<0.0012 ^{#1}	<0.0005 ^{#1}	<0.0012 ^{#1}	<0.0005 ^{#1}	<0.0005	<0.0005	<0.0005	<0.0005
Captains Lagoon	Pathway	0021_SD009	0021_SD009_240410	10 Apr 2024	ES2411995	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Captains Lagoon	Pathway	0021_SD009	0021_SD009_241022	22 Oct 2024	ES2435078	<0.0062 ^{#1}	<0.0025 ^{#1}	<0.0062 ^{#1}	<0.0062 ^{#1}	<0.0025 ^{#1}	<0.0062 ^{#1}	<0.0025 ^{#1}	<0.0025 ^{#1}	<0.0025 ^{#1}	<0.0025 ^{#1}	<0.0025 ^{#1}
Captains Lagoon	Pathway	0021_SD009	0021_SD009_250401	01 Apr 2025	ES2510622	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Captains Lagoon	Pathway	0021_SD009	0021_SD009_251023	23 Oct 2025	ES2533521	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Captains Lagoon	Pathway	0021_SD011	CL_SED11_0-0.05	20 Apr 2017	ES1709644	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Captains Lagoon	Pathway	0021_SD011	JCQA05	20 Apr 2017	ES1709644	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Captains Lagoon	Pathway	0021_SD011	0021_SD011_241026	26 Oct 2024	ES2435541	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Captains Lagoon	Pathway	0021_SD011	0021_SD011_250401	01 Apr 2025	ES2510622	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Captains Lagoon	Pathway	0021_SD011	0021_SD011_251022	22 Oct 2025	ES2533521	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Captains Lagoon	Receptor	0020_SD019	CL_SED02_0-0.05	18 Apr 2017	ES1709535	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Captains Lagoon	Receptor	0020_SD019	CL_SD02_0.0_180501	01 May 2018	ES1812871	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Captains Lagoon	Receptor	0020_SD019	0020_QC201_211018	18 Oct 2021	281319	<0.001	<0.0002	<0.005	<0.001	<0.0002	<0.001	<0.001	<0.0001	<0.0001	<0.0002	<0.0002
Captains Lagoon	Receptor	0020_SD019	0020_SD019_211018	18 Oct 2021	ES2138638	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Captains Lagoon	Receptor	0020_SD019	0020_SD019_220404	04 Apr 2022	ES2212597	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Captains Lagoon	Receptor	0020_SD019	0020_SD019_221011	11 Oct 2022	ES2237104	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0007	<0.0005	<0.0005	<0.0005	<0.0005
Captains Lagoon	Receptor	0020_SD019	0020_SD019_230417	17 Apr 2023	ES2313254	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0003	<0.0005	<0.0005	<0.0005	<0.0005
Captains Lagoon	Receptor	0020_SD019	0020_SD019_231016	16 Oct 2023	ES2336397	<0.0025 ^{#1}	<0.0010 ^{#1}	<0.0025 ^{#1}	<0.0025 ^{#1}	<0.0010 ^{#1}	<0.0025 ^{#1}	0.0011	<0.0010 ^{#1}	<0.0010 ^{#1}	<0.0010 ^{#1}	<0.0010 ^{#1}
Captains Lagoon	Receptor	0020_SD019	0020_QC103_240408	08 Apr 2024	ES2411964	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Captains Lagoon	Receptor	0020_SD019	0020_QC203_240408	08 Apr 2024	348827	<0.001	<0.0002	<0.005	<0.001	<0.0002	<0.001	<0.001	<0.0001	<0.0001	<0.0002	<0.0002
Captains Lagoon	Receptor	0020_SD019	0020_SD019_240408	08 Apr 2024	ES2411964	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Captains Lagoon	Receptor	0020_SD019	0020_SD019_241025	25 Oct 2024	ES2435539	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Captains Lagoon	Receptor	0020_SD019	0020_SD019_250331	31 Mar 2025	ES2510618	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Captains Lagoon	Receptor	0020_SD019	0020_SD019_251020	20 Oct 2025	ES2533546	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Captains Lagoon	Receptor	0020_SD024	CL_SED07_0-0.05	18 Apr 2017	ES1709535	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Captains Lagoon	Receptor	0020_SD024	CL_QC220_180501	01 May 2018	597346	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005
Captains Lagoon	Receptor	0020_SD024	CL_SD07_0.0_180501	01 May 2018	ES1812871	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Captains Lagoon	Receptor	0020_SD024	0020_SD024_211018	18 Oct 2021	ES2138638	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Captains Lagoon	Receptor	0020_SD024	0020_SD024_220404	04 Apr 2022	ES2212597	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Captains Lagoon	Receptor	0020_SD024	0020_SD024_221012	10 Oct 2022	ES2236866	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Captains Lagoon	Receptor	0020_SD024	0020_SD024_221012	12 Oct 2022	ES2237104	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Captains Lagoon	Receptor	0020_SD024	0020_QC140_230130	30 Jan 2023	ES2303447	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Captains Lagoon	Receptor	0020_SD024	0020_SD024_230130	30 Jan 2023	ES2303447	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Captains Lagoon	Receptor	0020_SD024	0020_SD024_230417	17 Apr 2023	ES2313254	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Captains Lagoon	Receptor	0020_SD024	0020_SD024_231016	16 Oct 2023	ES2336397	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Captains Lagoon	Receptor	0020_SD024	0020_SD024_240408	08 Apr 2024	ES2411964	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Captains Lagoon	Receptor	0020_SD024	0020_QC111_241025	25 Oct 2024	ES2435539	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	0.0011	<0.0005	<0.0005
Captains Lagoon	Receptor	0020_SD024	0020_QC211_241025	25 Oct 2024	1156671	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005
Captains Lagoon	Receptor	0020_SD024	0020_SD024_241025	25 Oct 2024	ES2435539	<0.0006 ^{#1}	<0.0002	<0.0006 ^{#1}	<0.0006 ^{#1}	<0.0002	<0.0006 ^{#1}	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Captains Lagoon	Receptor	0020_SD024	0020_SD024_250331	31 Mar 2025	ES2510618	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Captains Lagoon	Receptor	0020_SD024	0020_QC101_251020	20 Oct 2025	ES2533546	<0.0006 ^{#1}	<0.0002	<0.0006 ^{#1}	<0.0006 ^{#1}	<0.0002	<0.0006 ^{#1}	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Captains Lagoon	Receptor	0020_SD024	0020_QC201_251020	20 Oct 2025	1285219	<0.005	<0.01	<0.005	<0.005	<0.01	0.0052	<0.005	<0.005	<0.01	<0.005	<0.005
Captains Lagoon	Receptor	0020_SD024	0020_SD024_251020	20 Oct 2025	ES2533546	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005



Appendix B
Table B6a
Historical Sediment Analytical Results - Captains Lagoon, Flatrock Creek, Mary Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

EQ	PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
	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)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
	0.0005	0.0002	0.0005	0.0005	0.0002	0.0005	0.0002	0.0001	0.0001	0.0002	0.0002

Catchment	SPR	Location	Field ID	Date	Lab Report No.											
Flatrock Creek	Pathway	0021_SD018	FC_SED06_0.0-0.1	19 Apr 2017	ES1709535	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Pathway	0021_SD018	0021_QC209_211020	20 Oct 2021	281322	<0.01	<0.0020	<0.05	<0.01	<0.002	<0.01	<0.01	<0.001	<0.001	<0.002	<0.002
Flatrock Creek	Pathway	0021_SD018	0021_SD018_211020	20 Oct 2021	ES2138639	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Pathway	0021_SD018	0021_QC111_220407	07 Apr 2022	ES2212442	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Pathway	0021_SD018	0021_QC211_220407	07 Apr 2022	293031	<0.003	<0.0006	<0.02	<0.003	<0.0006	<0.003	<0.003	<0.0003	<0.0003	<0.0006	<0.0006
Flatrock Creek	Pathway	0021_SD018	0021_SD018_220407	07 Apr 2022	ES2212442	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Pathway	0021_SD018	0021_SD018_221012	12 Oct 2022	ES2237106	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Pathway	0021_SD018	0021_SD018_230419	19 Apr 2023	ES2313364	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	0.0008	<0.0005	<0.0005
Flatrock Creek	Pathway	0021_SD018	0021_SD018_231018	18 Oct 2023	ES2336399	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Pathway	0021_SD018	0021_SD018_240410	10 Apr 2024	ES2411995	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Pathway	0021_SD018	0021_SD018_241026	26 Oct 2024	ES2435541	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Pathway	0021_SD018	0021_SD018_250403	03 Apr 2025	ES2510622	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Pathway	0021_SD018	0021_QC126_251022	22 Oct 2025	ES2533538	<0.0006 ^{#1}	<0.0002	<0.0006 ^{#1}	<0.0006 ^{#1}	<0.0002	<0.0006 ^{#1}	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Pathway	0021_SD018	0021_QC226_251022	22 Oct 2025	1285374	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005
Flatrock Creek	Pathway	0021_SD018	0021_SD018_251022	22 Oct 2025	ES2533521	<0.0006 ^{#1}	<0.0002	<0.0006 ^{#1}	<0.0006 ^{#1}	<0.0002	<0.0006 ^{#1}	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Pathway	0021_SD021	AB_SED09_0.0-0.05	20 Apr 2017	ES1709644	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Pathway	0021_SD021	0021_SD021_211026	26 Oct 2021	ES2138639	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Pathway	0021_SD021	0021_SD021_220407	07 Apr 2022	ES2212442	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Pathway	0021_SD021	0021_SD021_221013	13 Oct 2022	ES2237106	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Pathway	0021_SD021	0021_QC102_230419	19 Apr 2023	ES2313364	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Pathway	0021_SD021	0021_QC202_230419	19 Apr 2023	321517	<0.001	<0.0002	<0.005	<0.001	<0.0002	<0.001	<0.001	<0.0001	<0.0001	<0.0002	<0.0002
Flatrock Creek	Pathway	0021_SD021	0021_SD021_230419	19 Apr 2023	ES2313364	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Pathway	0021_SD021	0021_SD021_231018	18 Oct 2023	ES2336399	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Pathway	0021_SD021	0021_SD021_240410	10 Apr 2024	ES2411995	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Pathway	0021_SD021	0021_SD021_241023	23 Oct 2024	ES2435078	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Pathway	0021_SD021	0021_SD021_250404	04 Apr 2025	ES2510622	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Pathway	0021_SD021	0021_SD021_251021	21 Oct 2025	ES2533521	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Receptor	0020_SD002	FC_SED02_0.0-0.05	19 Apr 2017	ES1709535	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Receptor	0020_SD002	FC_SD02_0.0_180515	15 May 2018	ES1814324	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Receptor	0020_SD002	0020_QC203_211019	19 Oct 2021	281319	<0.001	<0.0002	<0.005	<0.001	<0.0002	<0.001	<0.001	<0.0001	<0.0001	<0.0002	<0.0002
Flatrock Creek	Receptor	0020_SD002	0020_SD002_211019	19 Oct 2021	ES2138638	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Receptor	0020_SD002	0020_QC101_220404	04 Apr 2022	ES2212597	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Receptor	0020_SD002	0020_SD002_220404	04 Apr 2022	ES2212597	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Receptor	0020_SD002	0020_SD002_221010	10 Oct 2022	ES2237104	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Receptor	0020_SD002	0020_SD002_230417	17 Apr 2023	ES2313254	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Receptor	0020_SD002	0020_SD002_231016	16 Oct 2023	ES2336397	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Receptor	0020_SD002	0020_SD002_240408	08 Apr 2024	ES2411964	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Receptor	0020_SD002	0020_SD002_241025	25 Oct 2024	ES2435539	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Receptor	0020_SD002	0020_QC252_250401	01 Apr 2025	1209674	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005
Flatrock Creek	Receptor	0020_SD002	0020_SD002_250401	01 Apr 2025	ES2510618	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Receptor	0020_SD002	0020_SD002_251020	20 Oct 2025	ES2533546	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Receptor	0020_SD004	FC_SED04_0.0-0.05	19 Apr 2017	ES1709535	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Receptor	0020_SD004	FC_SD04_0.0_180515	15 May 2018	ES1814324	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Receptor	0020_SD004	FC_SD04_0.2_180515	15 May 2018	ES1814324	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Receptor	0020_SD004	0020_SD004_211018	18 Oct 2021	ES2138638	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Receptor	0020_SD004	0020_SD004_220404	04 Apr 2022	ES2212597	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Receptor	0020_SD004	0020_SD004_221010	10 Oct 2022	ES2237104	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005



Appendix B
Table B6a
Historical Sediment Analytical Results - Captains Lagoon, Flatrock Creek, Mary Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
	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)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.0005	0.0002	0.0005	0.0005	0.0002	0.0005	0.0002	0.0001	0.0001	0.0002	0.0002

Catchment	SPR	Location	Field ID	Date	Lab Report No.											
Flatrock Creek	Receptor	0020_SD004	0020_SD004_230417	17 Apr 2023	ES2313254	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Receptor	0020_SD004	0020_SD004_231016	16 Oct 2023	ES2336397	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Receptor	0020_SD004	0020_SD004_240408	08 Apr 2024	ES2411964	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Receptor	0020_SD004	0020_QC150_241021	21 Oct 2024	ES2435143	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Receptor	0020_SD004	0020_SD004_241021	21 Oct 2024	ES2435143	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Receptor	0020_SD004	0020_QC151_250331	31 Mar 2025	ES2510618	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Receptor	0020_SD004	0020_SD004_250331	31 Mar 2025	ES2510618	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Flatrock Creek	Receptor	0020_SD004	0020_SD004_251020	20 Oct 2025	ES2533546	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Pathway	0021_SD006	B_SED01_0.3-0.4	12 Apr 2017	ES1709064	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Pathway	0021_SD006	0021_SD006_211020	20 Oct 2021	ES2138639	<0.0006 ^{#1}	<0.0002	<0.0006 ^{#1}	<0.0006 ^{#1}	<0.0002	<0.0006 ^{#1}	0.0047	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Pathway	0021_SD006	0021_SD006_221012	12 Oct 2022	ES2237106	<0.0006 ^{#1}	<0.0002	<0.0006 ^{#1}	<0.0006 ^{#1}	<0.0002	<0.0006 ^{#1}	0.0105	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Pathway	0021_SD006	0021_SD006_230419	19 Apr 2023	ES2313364	<0.0006 ^{#1}	<0.0002	<0.0006 ^{#1}	<0.0006 ^{#1}	<0.0002	<0.0006 ^{#1}	0.0007	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Pathway	0021_SD006	0021_SD006_231018	18 Oct 2023	ES2336399	<0.0012 ^{#1}	<0.0005 ^{#1}	<0.0012 ^{#1}	<0.0012 ^{#1}	<0.0005 ^{#1}	<0.0012 ^{#1}	0.0035	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Pathway	0021_SD006	0021_SD006_240410	10 Apr 2024	ES2411995	<0.0006 ^{#1}	<0.0002	<0.0006 ^{#1}	<0.0006 ^{#1}	<0.0002	<0.0006 ^{#1}	0.0013	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Pathway	0021_SD006	0021_SD006_241025	25 Oct 2024	ES2435541	<0.0006 ^{#1}	<0.0002	<0.0006 ^{#1}	<0.0006 ^{#1}	<0.0002	<0.0006 ^{#1}	0.0017	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Pathway	0021_SD006	0021_SD006_250130	30 Jan 2025	ES2503552	<0.0005	0.0004	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Pathway	0021_SD006	0021_SD006_250404	04 Apr 2025	ES2510622	<0.0006 ^{#1}	<0.0002	<0.0006 ^{#1}	<0.0006 ^{#1}	<0.0002	<0.0006 ^{#1}	0.0011	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Pathway	0021_SD006	0021_SD006_250805	05 Aug 2025	ES2524252	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Pathway	0021_SD006	0021_SD006_250825	25 Aug 2025	ES2526742	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Pathway	0021_SD006	0021_SD006_250912	12 Sep 2025	ES2528885	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Pathway	0021_SD036	MC_SD02_0.0_180323	23 Mar 2018	ES1809241	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Pathway	0021_SD036	0021_SD036_221011	11 Oct 2022	ES2237106	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Pathway	0021_SD036	0021_SD036_230418	18 Apr 2023	ES2313364	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Pathway	0021_SD036	0021_SD036_231017	17 Oct 2023	ES2336399	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Pathway	0021_SD036	0021_SD036_240409	09 Apr 2024	ES2411995	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0020	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Pathway	0021_SD036	0021_SD036_241028	28 Oct 2024	ES2435541	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Pathway	0021_SD036	0021_SD036_250401	01 Apr 2025	ES2510622	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Pathway	0021_SD036	0021_SD036_251021	21 Oct 2025	ES2533521	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Pathway	0021_SD037	MC_SD03_0.0_180323	23 Mar 2018	ES1809241	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Pathway	0021_SD037	MC_SD03_0.0_180501	05 May 2018	ES1812871	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Pathway	0021_SD037	0021_SD037_221011	11 Oct 2022	ES2237106	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Pathway	0021_SD037	0021_SD037_230418	18 Apr 2023	ES2313364	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Pathway	0021_SD037	0021_SD037_231017	17 Oct 2023	ES2336399	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Pathway	0021_SD037	0021_SD037_240409	09 Apr 2024	ES2411995	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Pathway	0021_SD037	0021_SD037_241023	23 Oct 2024	ES2435078	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Pathway	0021_SD037	0021_SD037_250401	01 Apr 2025	ES2510622	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Pathway	0021_SD037	0021_SD037_251021	21 Oct 2025	ES2533521	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Pathway	0021_SD040	MC_QC110_180328	28 Mar 2018	ES1809328	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Pathway	0021_SD040	MC_SD06_0.0_180405	05 Apr 2018	ES1810551	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Pathway	0021_SD040	0021_SD040_221012	12 Oct 2022	ES2237106	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Pathway	0021_SD040	0021_SD040_230419	19 Apr 2023	ES2313364	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Pathway	0021_SD040	0021_SD040_231017	18 Oct 2023	ES2336399	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Pathway	0021_SD040	0021_SD040_240410	10 Apr 2024	ES2411995	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Pathway	0021_SD040	0021_SD040_241025	25 Oct 2024	ES2435541	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Pathway	0021_SD040	0021_SD040_250403	03 Apr 2025	ES2510622	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Pathway	0021_SD040	0021_SD040_251021	21 Oct 2025	ES2533521	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005



Appendix B
Table B6a
Historical Sediment Analytical Results - Captains Lagoon, Flatrock Creek, Mary Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
	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)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.0005	0.0002	0.0005	0.0005	0.0002	0.0005	0.0002	0.0001	0.0001	0.0002	0.0002

Catchment	SPR	Location	Field ID	Date	Lab Report No.											
Mary Creek	Receptor	0021_SD035	MC_SD01_0.0_180320	20 Mar 2018	ES1808818	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Receptor	0021_SD035	MC_SD01_0.3_180320	20 Mar 2018	ES1814922	-	-	-	-	-	-	-	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Receptor	0021_SD035	MC_SD01_0.0_180501	01 May 2018	ES1812871	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Receptor	0021_SD035	0021_SD035_221012	12 Oct 2022	ES2237106	<0.0006 ^{#1}	<0.0002	<0.0006 ^{#1}	<0.0006 ^{#1}	<0.0002	<0.0006 ^{#1}	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Receptor	0021_SD035	0021_SD035_230418	18 Apr 2023	ES2313364	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Receptor	0021_SD035	0021_SD035_231017	17 Oct 2023	ES2336399	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Receptor	0021_SD035	0021_SD035_240409	09 Apr 2024	ES2411995	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0004	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Receptor	0021_SD035	0021_SD035_241023	23 Oct 2024	ES2435078	<0.0006 ^{#1}	<0.0002	<0.0006 ^{#1}	<0.0006 ^{#1}	<0.0002	<0.0006 ^{#1}	0.0014	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Receptor	0021_SD035	0021_SD035_250129	29 Jan 2025	ES2503552	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Receptor	0021_SD035	0021_SD035_250401	01 Apr 2025	ES2510622	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Receptor	0021_SD035	0021_SD035_251021	21 Oct 2025	ES2533521	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Receptor	0021_SD044	MC_SD10_0.0_180320	20 Mar 2018	ES1808818	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Receptor	0021_SD044	MC_SD10_0.3_180320	20 Mar 2018	ES1814922	-	-	-	-	-	-	-	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Receptor	0021_SD044	MC_SD10_0.0_180328	28 Mar 2018	ES1814922	-	-	-	-	-	-	-	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Receptor	0021_SD044	MC_SD10_0.2_180328	28 Mar 2018	ES1814922	-	-	-	-	-	-	-	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Receptor	0021_SD044	0021_SD044_221012	12 Oct 2022	ES2237106	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Receptor	0021_SD044	0021_SD044_230418	18 Apr 2023	ES2313364	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Receptor	0021_SD044	0021_QC106_231017	17 Oct 2023	ES2336399	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Receptor	0021_SD044	0021_QC206_231017	17 Oct 2023	335876	<0.001	<0.0002	<0.005	<0.001	<0.0002	<0.001	<0.001	<0.0001	<0.0001	<0.0002	<0.0002
Mary Creek	Receptor	0021_SD044	0021_SD044_231017	17 Oct 2023	ES2336399	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Receptor	0021_SD044	0021_SD044_240409	09 Apr 2024	ES2411995	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Receptor	0021_SD044	0021_QC107_241023	23 Oct 2024	ES2435078	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Receptor	0021_SD044	0021_QC207_241023	23 Oct 2024	1154751	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005
Mary Creek	Receptor	0021_SD044	0021_SD044_241023	23 Oct 2024	ES2435078	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Receptor	0021_SD044	0021_SD044_250129	29 Jan 2025	ES2503552	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Receptor	0021_SD044	0021_QC104_250401	01 Apr 2025	ES2510113	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Receptor	0021_SD044	0021_QC204_250401	01 Apr 2025	1210052	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005
Mary Creek	Receptor	0021_SD044	0021_SD044_250401	01 Apr 2025	ES2510622	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Mary Creek	Receptor	0021_SD044	0021_SD044_251021	21 Oct 2025	ES2533521	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005

Comments
#1 Reported Analyte LOR is higher than Requested Analyte LOR
#2 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.



Appendix B
Table B6b
Historical Sediment Analytical Results - Clay Pools

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS			PFAS - Sums				PFAS - Perfluoroalkyl Sulfonic Acids				
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Sum of US EPA PFAS (PFOS + PFOA)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0002	0.0001	0.005	0.0001
0020_0021_Activity specific HHRA EPC for clay pools				0.0014								

Catchment	SPR	Location	Field ID	Date	Lab Report No.											
Clay Pools	Receptor	0021_SD066	UN2_SD01_0.0_180322	22 Mar 2018	ES1808902	0.0002	<0.0002	<0.0002	0.0002	0.0002	0.0002	-	<0.0002	<0.0002	<0.0002	-
Clay Pools	Receptor	0021_SD066	UN2_SD01_0.2_180322	22 Mar 2018	ES1814922	<0.0002	<0.0002	<0.0002	-	<0.0002	<0.0002	-	<0.0002	-	-	-
Clay Pools	Receptor	0021_SD066	UN2_SD01_0.0_190211	11 Feb 2019	ES1904669	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	<0.0002	<0.0002	<0.0002	-
Clay Pools	Receptor	0021_SD066	UN2_SD01_190318	18 Mar 2019	ES1908940	0.0005	<0.0002	<0.0002	0.0005	0.0005	0.0005	-	<0.0002	<0.0002	<0.0002	-
Clay Pools	Receptor	0021_SD066	0021_SD066_221012	12 Oct 2022	ES2237106	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	<0.0002	<0.0002	<0.0002	-
Clay Pools	Receptor	0021_SD066	0021_SD066_230419	19 Apr 2023	ES2313364	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	<0.0002	<0.0002	<0.0002	-
Clay Pools	Receptor	0021_SD066	0021_QC110_231018	18 Oct 2023	ES2336399	0.0005	<0.0002	<0.0002	0.0005	0.0005	0.0005	-	<0.0002	<0.0002	<0.0002	-
Clay Pools	Receptor	0021_SD066	0021_QC210_231018	18 Oct 2023	335876	0.0007	0.0002	<0.0002	0.0009	0.0009	-	0.0007	<0.0002	<0.0004	<0.0002	-
Clay Pools	Receptor	0021_SD066	0021_SD066_231017	18 Oct 2023	ES2336399	0.0007	0.0003	<0.0002	0.0010	0.0010	0.0010	-	<0.0002	<0.0002	<0.0002	-
Clay Pools	Receptor	0021_SD066	0021_SD066_240410	10 Apr 2024	ES2411995	0.0028	<0.0002	<0.0002	0.0028	0.0028	0.0028	-	<0.0002	<0.0002	<0.0002	-
Clay Pools	Receptor	0021_SD066	0021_QC154_241023	23 Oct 2024	ES2435078	0.0006	0.0002	<0.0002	0.0008	0.0008	0.0008	-	<0.0002	<0.0002	<0.0002	-
Clay Pools	Receptor	0021_SD066	0021_SD066_241023	23 Oct 2024	ES2435078	0.0006	<0.0002	<0.0002	0.0006	0.0006	0.0006	-	<0.0002	<0.0002	<0.0002	-
Clay Pools	Receptor	0021_SD066	0021_SD066_250402	02 Apr 2025	ES2510622	0.0004	<0.0002	<0.0002	0.0004	0.0004	0.0004	-	<0.0002	<0.0002	<0.0002	-
Clay Pools	Receptor	0021_SD066	0021_SD066_251023	23 Oct 2025	ES2533521	0.0004	<0.0002	<0.0002	0.0004	0.0004	0.0004	-	<0.0002	<0.0002	<0.0002	-
Clay Pools	Receptor	0021_SD067	UN2_QC204_180322	22 Mar 2018	601685	<0.005	<0.005	<0.005	<0.005	<0.01	-	-	<0.005	<0.005	<0.005	-
Clay Pools	Receptor	0021_SD067	UN2_SD02_0.0_180322	22 Mar 2018	ES1809902	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	<0.0002	<0.0002	<0.0002	-
Clay Pools	Receptor	0021_SD067	UN2_SD02_0.2_180322	22 Mar 2018	ES1814922	<0.0002	<0.0002	<0.0002	-	<0.0002	<0.0002	-	<0.0002	-	-	-
Clay Pools	Receptor	0021_SD067	UN_QC104_180322	22 Mar 2018	ES1809902	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	<0.0002	<0.0002	<0.0002	-
Clay Pools	Receptor	0021_SD067	UN2_SD02_0.0_190211	11 Feb 2019	ES1904669	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	<0.0002	<0.0002	<0.0002	-
Clay Pools	Receptor	0021_SD067	UN2_QC106_190318	18 Mar 2019	ES1908940	0.0002	0.0002	<0.0002	0.0004	0.0004	0.0004	-	<0.0002	<0.0002	<0.0002	-
Clay Pools	Receptor	0021_SD067	UN2_SD02_190318	18 Mar 2019	ES1908940	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	<0.0002	<0.0002	<0.0002	-
Clay Pools	Receptor	0021_SD067	0021_SD067_221012	12 Oct 2022	ES2237106	0.0002	<0.0002	<0.0002	0.0002	0.0002	0.0002	-	<0.0002	<0.0002	<0.0002	-
Clay Pools	Receptor	0021_SD067	0021_SD067_230419	19 Apr 2023	ES2313364	0.0004	<0.0002	<0.0002	0.0004	0.0004	0.0004	-	<0.0002	<0.0002	<0.0002	-
Clay Pools	Receptor	0021_SD067	0021_SD067_231018	18 Oct 2023	ES2336399	<0.0005 ^{#1}	<0.0005 ^{#1}	<0.0005 ^{#1}	<0.0005 ^{#1}	<0.0005 ^{#1}	<0.0005 ^{#1}	-	<0.0005 ^{#1}	<0.0005 ^{#1}	<0.0005 ^{#1}	-
Clay Pools	Receptor	0021_SD067	0021_SD067_240410	10 Apr 2024	ES2411995	0.0004	<0.0002	<0.0002	0.0004	0.0004	0.0004	-	<0.0002	<0.0002	<0.0002	-
Clay Pools	Receptor	0021_SD067	0021_SD067_241023	23 Oct 2024	ES2435078	0.0004	0.0002	<0.0002	0.0006	0.0006	0.0006	-	<0.0002	<0.0002	<0.0002	-
Clay Pools	Receptor	0021_SD067	0021_SD067_250402	02 Apr 2025	ES2510622	0.0017	0.0004	<0.0002	0.0021	0.0021	0.0021	-	<0.0002	<0.0002	<0.0002	-
Clay Pools	Receptor	0021_SD067	0021_SD067_251023	23 Oct 2025	ES2533521	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	<0.0002	<0.0002	<0.0002	-
Clay Pools	Receptor	0021_SD068	UN2_SD03_0.0_180322	22 Mar 2018	ES1809902	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	<0.0002	<0.0002	<0.0002	-
Clay Pools	Receptor	0021_SD068	UN2_SD03_0.2_180322	22 Mar 2018	ES1814922	<0.0002	<0.0002	<0.0002	-	<0.0002	<0.0002	-	<0.0002	-	-	-
Clay Pools	Receptor	0021_SD068	UN2_QC100_190211	11 Feb 2019	ES1904669	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	<0.0002	<0.0002	<0.0002	-
Clay Pools	Receptor	0021_SD068	UN2_QC200_190211	11 Feb 2019	640876	<0.005	<0.005	<0.005	<0.005	<0.01	-	-	<0.005	<0.005	<0.005	<0.005
Clay Pools	Receptor	0021_SD068	UN2_SD03_0.0_190211	11 Feb 2019	ES1904669	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	<0.0002	<0.0002	<0.0002	-
Clay Pools	Receptor	0021_SD068	UN2_SD03_190318	18 Mar 2019	ES1908940	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	-	<0.0002	<0.0002	<0.0002	-
Clay Pools	Receptor	0021_SD068	0021_SD068_221012	12 Oct 2022	ES2237106	0.0013	0.0004	<0.0002	0.0017	0.0017	0.0017	-	<0.0002	<0.0002	<0.0002	-
Clay Pools	Receptor	0021_SD068	0021_SD068_230419	19 Apr 2023	ES2313364	0.0111	<0.0002	<0.0002	0.0111	0.0111	0.0111	-	<0.0002	<0.0002	<0.0002	-
Clay Pools	Receptor	0021_SD068	0021_SD068_231017	17 Oct 2023	ES2336399	0.0046	0.0010	<0.0002	0.0056	0.0056	0.0056	-	<0.0002	<0.0002	<0.0002	-
Clay Pools	Receptor	0021_SD068	0021_SD068_240410	10 Apr 2024	ES2411995	0.0049	0.0003	<0.0002	0.0052	0.0052	0.0052	-	<0.0002	<0.0002	<0.0002	-
Clay Pools	Receptor	0021_SD068	0021_SD068_241023	23 Oct 2024	ES2435078	0.0005	<0.0002	<0.0002	0.0005	0.0005	0.0005	-	<0.0002	<0.0002	<0.0002	-
Clay Pools	Receptor	0021_SD068	0021_SD068_250402	02 Apr 2025	ES2510622	0.0006	<0.0002	<0.0002	0.0006	0.0006	0.0006	-	<0.0002	<0.0002	<0.0002	-
Clay Pools	Receptor	0021_SD068	0021_SD068_251023	23 Oct 2025	ES2533521	0.0006	<0.0002	<0.0002	0.0006	0.0006	0.0006	-	<0.0002	<0.0002	<0.0002	-
Clay Pools	Receptor	0021_SD069	UN2_SD04_0.0_180322	22 Mar 2018	ES1809902	0.0012	<0.0002	<0.0002	0.0012	0.0012	0.0012	-	<0.0002	<0.0002	<0.0002	-
Clay Pools	Receptor	0021_SD069	UN2_SD04_0.2_180322	22 Mar 2018	ES1814922	0.0014	<0.0002	<0.0002	-	0.0014	0.0014	-	<0.0002	-	-	-
Clay Pools	Receptor	0021_SD069	UN2_SD04_0.0_190211	11 Feb 2019	ES1904669	0.0008	<0.0002	<0.0002	0.0008	0.0008	0.0008	-	<0.0002	<0.0002	<0.0002	-
Clay Pools	Receptor	0021_SD069	UN2_SD04_190318	18 Mar 2019	ES1908940	0.0119	0.0010	<0.0002	0.0129	0.0129	0.0129	-	<0.0002	<0.0002	<0.0002	-
Clay Pools	Receptor	0021_SD069	0021_SD069_221012	12 Oct 2022	ES2237106	0.0046	0.0007	<0.0002	0.0053	0.0053	0.0053	-	<0.0002	<0.0002	<0.0002	-



Appendix B
Table B6b
Historical Sediment Analytical Results - Clay Pools

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS			PFAS - Sums				PFAS - Perfluoroalkyl Sulfonic Acids				
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Sum of US EPA PFAS (PFOS + PFOA)*	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropropanesulfonic acid (PFPrS)	Perfluoropentane sulfonic acid (PFPeS)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0001	0.0001	0.0002	0.0001	0.005	0.0001
0020_0021_Activity specific HHRA EPC for clay pools				0.0014								

Catchment	SPR	Location	Field ID	Date	Lab Report No.												
Clay Pools	Receptor	0021_SD069	0021_SD069_230419	19 Apr 2023	ES2313364	0.0108	<0.0002	<0.0002	0.0108	0.0108	0.0108	-	<0.0002	<0.0002	<0.0002	-	<0.0002
Clay Pools	Receptor	0021_SD069	0021_SD069_231017	17 Oct 2023	ES2336399	0.0193	0.0012	<0.0002	0.0205	0.0205	0.0205	-	<0.0002	<0.0002	<0.0002	-	<0.0002
Clay Pools	Receptor	0021_SD069	0021_QC107_240410	10 Apr 2024	ES2411995	0.0460	0.0052	<0.0002	0.0512	0.0512	0.0512	-	<0.0002	<0.0002	<0.0002	-	<0.0002
Clay Pools	Receptor	0021_SD069	0021_QC207_240410	10 Apr 2024	348825	0.043	0.0044	0.0002	0.048	0.047	-	0.043	0.0001	<0.0002	<0.0001	-	<0.0001
Clay Pools	Receptor	0021_SD069	0021_SD069_240410	10 Apr 2024	ES2411995	0.0404	0.0044	<0.0002	0.0457	0.0448	0.0448	-	<0.0002	0.0009	<0.0002	-	<0.0002
Clay Pools	Receptor	0021_SD069	0021_SD069_241023	23 Oct 2024	ES2435078	0.0214	0.0020	0.0004	0.0238	0.0234	0.0238	-	<0.0002	<0.0002	<0.0002	-	<0.0002
Clay Pools	Receptor	0021_SD069	0021_SD069_250402	02 Apr 2025	ES2510622	0.0038	0.0003	<0.0002	0.0044	0.0041	0.0041	-	<0.0002	0.0003	<0.0002	-	<0.0002
Clay Pools	Receptor	0021_SD069	0021_SD069_251023	23 Oct 2025	ES2533521	0.0061	<0.0002	<0.0002	0.0061	0.0061	0.0061	-	<0.0002	<0.0002	<0.0002	-	<0.0002

Statistics

Number of Results	54	54	54	50	54	52	2	54	50	50	1	50
Number of Detects	36	17	2	35	36	34	2	1	2	0	0	0
Minimum Concentration	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0007	0.0001	<0.0002	<0.0001	<0.005	<0.0001
Minimum Detect	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0007	0.0001	0.0003	ND	ND	ND
Maximum Concentration	0.046	0.0052	<0.005	0.0512	0.0512	0.0512	0.043	<0.005	<0.005	<0.005	<0.005	<0.005
Maximum Detect	0.046	0.0052	0.0004	0.0512	0.0512	0.0512	0.043	0.0001	0.0009	ND	ND	ND
Average Concentration *	0.0047	0.00057	0.0002	0.0064	0.0051	0.0044	0.022	0.00019	0.00022	0.0002		0.0002
Geometric Average *	0.00077	0.00021	0.00012	0.001	0.00083	0.00078	0.0055	0.00011	0.00013	0.00011	0.0025	0.00011
Median Concentration *	0.00055	0.0001	0.0001	0.0006	0.0006	0.00055	0.02185	0.0001	0.0001	0.0001	0.0025	0.0001
Standard Deviation *	0.01	0.0011	0.00046	0.013	0.011	0.01	0.03	0.00046	0.00048	0.00048		0.00048
Geometric Standard Deviation *	6.5	3.3	1.9	7.4	6.7	6.5	18	1.9	2.1	1.9		1.9
95% UCL (Student's-t) *	0.00704	0.00083586	0.00030339	0.00938	0.00769	0.00679	0.155	0.00029587	0.00033587	0.00031067		0.00031067
Number of Env Standard Exceedances	18	6	0	0	19	0	0	0	0	0	0	0
Number of Env Standard Exceedances (Detects Only)	16	4	0	0	17	0	0	0	0	0	0	0
% of Detects	67	31	4	70	67	65	100	2	4	0	0	0
% of Non-Detects	33	69	96	30	33	35	0	98	96	100	100	100
% of Detects at or above Env Standards	30	7	0	0	31	0	0	0	0	0	0	0
% of Results Below Env Standards or Non-Detect	70	93	100	100	69	100	100	100	100	100	100	100

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Reported Analyte LOR is higher than Requested Analyte LOR



Appendix B
Table B6b
Historical Sediment Analytical Results - Clay Pools

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Carboxylic Acids										
	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTTrDA)	Perfluoroundecanoic acid (PFUnDA)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.005	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001	0.0002	0.0005	0.0002	0.0002
0020_0021_Activity specific HHRA EPC for clay pools											

Catchment	SPR	Location	Field ID	Date	Lab Report No.										
Clay Pools	Receptor	0021_SD066	UN2_SD01_0.0_180322	22 Mar 2018	ES1808902	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Clay Pools	Receptor	0021_SD066	UN2_SD01_0.2_180322	22 Mar 2018	ES1814922	-	<0.001	-	-	<0.0002	<0.0002	<0.0002	-	-	-
Clay Pools	Receptor	0021_SD066	UN2_SD01_0.0_190211	11 Feb 2019	ES1904669	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Clay Pools	Receptor	0021_SD066	UN2_SD01_190318	18 Mar 2019	ES1908940	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Clay Pools	Receptor	0021_SD066	0021_SD066_221012	12 Oct 2022	ES2237106	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Clay Pools	Receptor	0021_SD066	0021_SD066_230419	19 Apr 2023	ES2313364	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0006 ^{#1}	<0.0002
Clay Pools	Receptor	0021_SD066	0021_QC110_231018	18 Oct 2023	ES2336399	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Clay Pools	Receptor	0021_SD066	0021_QC210_231018	18 Oct 2023	335876	-	<0.0004	<0.001	<0.001	<0.0002	<0.0002	<0.0002	<0.0004	<0.01	<0.001
Clay Pools	Receptor	0021_SD066	0021_SD066_231017	18 Oct 2023	ES2336399	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Clay Pools	Receptor	0021_SD066	0021_SD066_240410	10 Apr 2024	ES2411995	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Clay Pools	Receptor	0021_SD066	0021_QC154_241023	23 Oct 2024	ES2435078	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Clay Pools	Receptor	0021_SD066	0021_SD066_241023	23 Oct 2024	ES2435078	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Clay Pools	Receptor	0021_SD066	0021_SD066_250402	02 Apr 2025	ES2510622	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Clay Pools	Receptor	0021_SD066	0021_SD066_251023	23 Oct 2025	ES2533521	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Clay Pools	Receptor	0021_SD067	UN2_QC204_180322	22 Mar 2018	601685	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Clay Pools	Receptor	0021_SD067	UN2_SD02_0.0_180322	22 Mar 2018	ES1809902	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Clay Pools	Receptor	0021_SD067	UN2_SD02_0.2_180322	22 Mar 2018	ES1814922	-	<0.001	-	-	<0.0002	<0.0002	-	<0.0002	-	-
Clay Pools	Receptor	0021_SD067	UN_QC104_180322	22 Mar 2018	ES1809902	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Clay Pools	Receptor	0021_SD067	UN2_SD02_0.0_190211	11 Feb 2019	ES1904669	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Clay Pools	Receptor	0021_SD067	UN2_QC106_190318	18 Mar 2019	ES1908940	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Clay Pools	Receptor	0021_SD067	UN2_SD02_190318	18 Mar 2019	ES1908940	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Clay Pools	Receptor	0021_SD067	0021_SD067_221012	12 Oct 2022	ES2237106	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Clay Pools	Receptor	0021_SD067	0021_SD067_230419	19 Apr 2023	ES2313364	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0006 ^{#1}	<0.0002
Clay Pools	Receptor	0021_SD067	0021_SD067_231018	18 Oct 2023	ES2336399	-	<0.002 ^{#1}	<0.0005 ^{#1}	<0.0005 ^{#1}	<0.0005 ^{#1}	<0.0005 ^{#1}	<0.0005 ^{#1}	<0.0005 ^{#1}	<0.0012 ^{#1}	<0.0005 ^{#1}
Clay Pools	Receptor	0021_SD067	0021_SD067_240410	10 Apr 2024	ES2411995	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Clay Pools	Receptor	0021_SD067	0021_SD067_241023	23 Oct 2024	ES2435078	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Clay Pools	Receptor	0021_SD067	0021_SD067_250402	02 Apr 2025	ES2510622	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Clay Pools	Receptor	0021_SD067	0021_SD067_251023	23 Oct 2025	ES2533521	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Clay Pools	Receptor	0021_SD068	UN2_SD03_0.0_180322	22 Mar 2018	ES1809902	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Clay Pools	Receptor	0021_SD068	UN2_SD03_0.2_180322	22 Mar 2018	ES1814922	-	<0.001	-	-	<0.0002	<0.0002	-	<0.0002	-	-
Clay Pools	Receptor	0021_SD068	UN2_QC100_190211	11 Feb 2019	ES1904669	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Clay Pools	Receptor	0021_SD068	UN2_QC200_190211	11 Feb 2019	640876	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Clay Pools	Receptor	0021_SD068	UN2_SD03_0.0_190211	11 Feb 2019	ES1904669	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Clay Pools	Receptor	0021_SD068	UN2_SD03_190318	18 Mar 2019	ES1908940	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Clay Pools	Receptor	0021_SD068	0021_SD068_221012	12 Oct 2022	ES2237106	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Clay Pools	Receptor	0021_SD068	0021_SD068_230419	19 Apr 2023	ES2313364	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0006 ^{#1}	<0.0002
Clay Pools	Receptor	0021_SD068	0021_SD068_231017	17 Oct 2023	ES2336399	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Clay Pools	Receptor	0021_SD068	0021_SD068_240410	10 Apr 2024	ES2411995	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Clay Pools	Receptor	0021_SD068	0021_SD068_241023	23 Oct 2024	ES2435078	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Clay Pools	Receptor	0021_SD068	0021_SD068_250402	02 Apr 2025	ES2510622	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Clay Pools	Receptor	0021_SD068	0021_SD068_251023	23 Oct 2025	ES2533521	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Clay Pools	Receptor	0021_SD069	UN2_SD04_0.0_180322	22 Mar 2018	ES1809902	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Clay Pools	Receptor	0021_SD069	UN2_SD04_0.2_180322	22 Mar 2018	ES1814922	-	<0.001	-	-	<0.0002	<0.0002	-	<0.0002	-	-
Clay Pools	Receptor	0021_SD069	UN2_SD04_0.0_190211	11 Feb 2019	ES1904669	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Clay Pools	Receptor	0021_SD069	UN2_SD04_190318	18 Mar 2019	ES1908940	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Clay Pools	Receptor	0021_SD069	0021_SD069_221012	12 Oct 2022	ES2237106	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002



	PFAS - Perfluoroalkyl Carboxylic Acids										
	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTTrDA)	Perfluoroundecanoic acid (PFUnDA)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.005	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001	0.0002	0.0005	0.0002	0.0002
0020_0021_Activity specific HHRA EPC for clay pools											

Catchment	SPR	Location	Field ID	Date	Lab Report No.											
Clay Pools	Receptor	0021_SD069	0021_SD069_230419	19 Apr 2023	ES2313364	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005 ^{#1}	<0.0002	<0.0002
Clay Pools	Receptor	0021_SD069	0021_SD069_231017	17 Oct 2023	ES2336399	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0006 ^{#1}	<0.0002	<0.0002
Clay Pools	Receptor	0021_SD069	0021_QC107_240410	10 Apr 2024	ES2411995	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0006 ^{#1}	<0.0002	<0.0002
Clay Pools	Receptor	0021_SD069	0021_QC207_240410	10 Apr 2024	348825	-	<0.0002	<0.002	<0.0050	0.0001	0.0004	0.0001	<0.0002	<0.005	<0.0005	<0.002
Clay Pools	Receptor	0021_SD069	0021_SD069_240410	10 Apr 2024	ES2411995	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
Clay Pools	Receptor	0021_SD069	0021_SD069_241023	23 Oct 2024	ES2435078	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0006 ^{#1}	<0.0002	<0.0002
Clay Pools	Receptor	0021_SD069	0021_SD069_250402	02 Apr 2025	ES2510622	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002
Clay Pools	Receptor	0021_SD069	0021_SD069_251023	23 Oct 2025	ES2533521	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002

Statistics

Number of Results	1	54	50	50	54	54	50	54	50	50	50
Number of Detects	0	0	0	0	1	1	1	0	0	0	0
Minimum Concentration	<0.005	<0.0002	<0.0002	<0.0002	0.0001	<0.0002	0.0001	<0.0002	<0.0005	<0.0002	<0.0002
Minimum Detect	ND	ND	ND	ND	0.0001	0.0004	0.0001	ND	ND	ND	ND
Maximum Concentration	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005
Maximum Detect	ND	ND	ND	ND	0.0001	0.0004	0.0001	ND	ND	ND	ND
Average Concentration *		0.00057	0.00022	0.00025	0.00019	0.0002	0.0002	0.00019	0.00049	0.00021	0.00022
Geometric Average *	0.0025	0.00051	0.00013	0.00013	0.00011	0.00012	0.00012	0.00012	0.00032	0.00012	0.00013
Median Concentration *	0.0025	0.0005	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.00025	0.0001	0.0001
Standard Deviation *		0.00039	0.00049	0.00058	0.00046	0.00046	0.00047	0.00046	0.00084	0.00048	0.00049
Geometric Standard Deviation *		1.5	2.1	2.2	1.9	1.9	1.9	1.9	2	2	2.1
95% UCL (Student's-t) *		0.00066016	0.00034101	0.00039159	0.00029587	0.00030158	0.00031161	0.00029768	0.0006932	0.00032295	0.00034101
Number of Env Standard Exceedances	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
% of Detects	0	0	0	0	2	2	2	0	0	0	0
% of Non-Detects	100	100	100	100	98	98	98	100	100	100	100
% of Detects at or above Env Standards	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

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Reported Analyte LOR is higher than Requested Analyte LOR



Appendix B
Table B6b
Historical Sediment Analytical Results - Clay Pools

	PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Ethyl perfluorooctane sulfonamidacetic acid (EtFOSAA)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidacetic 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)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.0005	0.0002	0.0005	0.0005	0.0002	0.0005	0.0002	0.0001	0.0001	0.0002	0.0002
0020_0021_Activity specific HHRA EPC for clay pools											

Catchment	SPR	Location	Field ID	Date	Lab Report No.										
Clay Pools	Receptor	0021_SD066	UN2_SD01_0.0_180322	22 Mar 2018	ES1808902	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD066	UN2_SD01_0.2_180322	22 Mar 2018	ES1814922	-	-	-	-	-	-	-	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD066	UN2_SD01_0.0_190211	11 Feb 2019	ES1904669	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD066	UN2_SD01_190318	18 Mar 2019	ES1908940	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD066	0021_SD066_221012	12 Oct 2022	ES2237106	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD066	0021_SD066_230419	19 Apr 2023	ES2313364	<0.0006 ^{#1}	<0.0002	<0.0006 ^{#1}	<0.0006 ^{#1}	<0.0002	<0.0006 ^{#1}	<0.0002	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD066	0021_QC110_231018	18 Oct 2023	ES2336399	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD066	0021_QC210_231018	18 Oct 2023	335876	<0.002	<0.0004	<0.01	<0.002	<0.0004	<0.002	<0.002	<0.0002	<0.0002	<0.0004
Clay Pools	Receptor	0021_SD066	0021_SD066_231017	18 Oct 2023	ES2336399	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD066	0021_SD066_240410	10 Apr 2024	ES2411995	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD066	0021_QC154_241023	23 Oct 2024	ES2435078	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD066	0021_SD066_241023	23 Oct 2024	ES2435078	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD066	0021_SD066_250402	02 Apr 2025	ES2510622	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD066	0021_SD066_251023	23 Oct 2025	ES2533521	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD067	UN2_QC204_180322	22 Mar 2018	601685	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.01	<0.005
Clay Pools	Receptor	0021_SD067	UN2_SD02_0.0_180322	22 Mar 2018	ES1809902	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD067	UN2_SD02_0.2_180322	22 Mar 2018	ES1814922	-	-	-	-	-	-	-	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD067	UN_QC104_180322	22 Mar 2018	ES1809902	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD067	UN2_SD02_0.0_190211	11 Feb 2019	ES1904669	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD067	UN2_QC106_190318	18 Mar 2019	ES1908940	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD067	UN2_SD02_190318	18 Mar 2019	ES1908940	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD067	0021_SD067_221012	12 Oct 2022	ES2237106	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD067	0021_SD067_230419	19 Apr 2023	ES2313364	<0.0006 ^{#1}	<0.0002	<0.0006 ^{#1}	<0.0006 ^{#1}	<0.0002	<0.0006 ^{#1}	<0.0002	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD067	0021_SD067_231018	18 Oct 2023	ES2336399	<0.0012 ^{#1}	<0.0005 ^{#1}	<0.0012 ^{#1}	<0.0012 ^{#1}	<0.0005 ^{#1}	<0.0012 ^{#1}	<0.0005 ^{#1}	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD067	0021_SD067_240410	10 Apr 2024	ES2411995	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD067	0021_SD067_241023	23 Oct 2024	ES2435078	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD067	0021_SD067_250402	02 Apr 2025	ES2510622	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD067	0021_SD067_251023	23 Oct 2025	ES2533521	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD068	UN2_SD03_0.0_180322	22 Mar 2018	ES1809902	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD068	UN2_SD03_0.2_180322	22 Mar 2018	ES1814922	-	-	-	-	-	-	-	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD068	UN2_QC100_190211	11 Feb 2019	ES1904669	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD068	UN2_QC200_190211	11 Feb 2019	640876	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.01	<0.005
Clay Pools	Receptor	0021_SD068	UN2_SD03_0.0_190211	11 Feb 2019	ES1904669	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD068	UN2_SD03_190318	18 Mar 2019	ES1908940	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD068	0021_SD068_221012	12 Oct 2022	ES2237106	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD068	0021_SD068_230419	19 Apr 2023	ES2313364	<0.0006 ^{#1}	<0.0002	<0.0006 ^{#1}	<0.0006 ^{#1}	<0.0002	<0.0006 ^{#1}	<0.0002	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD068	0021_SD068_231017	17 Oct 2023	ES2336399	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD068	0021_SD068_240410	10 Apr 2024	ES2411995	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD068	0021_SD068_241023	23 Oct 2024	ES2435078	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD068	0021_SD068_250402	02 Apr 2025	ES2510622	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD068	0021_SD068_251023	23 Oct 2025	ES2533521	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD069	UN2_SD04_0.0_180322	22 Mar 2018	ES1809902	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD069	UN2_SD04_0.2_180322	22 Mar 2018	ES1814922	-	-	-	-	-	-	-	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD069	UN2_SD04_0.0_190211	11 Feb 2019	ES1904669	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD069	UN2_SD04_190318	18 Mar 2019	ES1908940	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD069	0021_SD069_221012	12 Oct 2022	ES2237106	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005



Appendix B
Table B6b
Historical Sediment Analytical Results - Clay Pools

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
	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)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.0005	0.0002	0.0005	0.0005	0.0002	0.0005	0.0002	0.0001	0.0001	0.0002	0.0002
0020_0021_Activity specific HHRA EPC for clay pools											

Catchment	SPR	Location	Field ID	Date	Lab Report No.											
Clay Pools	Receptor	0021_SD069	0021_SD069_230419	19 Apr 2023	ES2313364	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD069	0021_SD069_231017	17 Oct 2023	ES2336399	<0.0006 ^{#1}	<0.0002	<0.0006 ^{#1}	<0.0006 ^{#1}	<0.0002	<0.0006 ^{#1}	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD069	0021_QC107_240410	10 Apr 2024	ES2411995	<0.0006 ^{#1}	<0.0002	<0.0006 ^{#1}	<0.0006 ^{#1}	<0.0002	<0.0006 ^{#1}	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD069	0021_QC207_240410	10 Apr 2024	348825	<0.005	<0.0002	<0.02	<0.01	<0.0002	<0.005	<0.001	<0.0001	<0.0001	<0.0002	<0.0002
Clay Pools	Receptor	0021_SD069	0021_SD069_240410	10 Apr 2024	ES2411995	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD069	0021_SD069_241023	23 Oct 2024	ES2435078	<0.0006 ^{#1}	<0.0002	<0.0006 ^{#1}	<0.0006 ^{#1}	<0.0002	<0.0006 ^{#1}	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD069	0021_SD069_250402	02 Apr 2025	ES2510622	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Clay Pools	Receptor	0021_SD069	0021_SD069_251023	23 Oct 2025	ES2533521	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005

Statistics

Number of Results	50	50	50	50	50	50	50	50	54	54	54	54
Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0001	<0.0001	<0.0002	<0.0002	<0.0002
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.005	<0.01	<0.02	<0.01	<0.01	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *	0.00041	0.0003	0.00064	0.00046	0.0003	0.00041	0.00022	0.00033	0.00042	0.00033	0.00033	0.00033
Geometric Average *	0.00031	0.00012	0.00033	0.00031	0.00012	0.00031	0.00013	0.00026	0.00027	0.00027	0.00027	0.00027
Median Concentration *	0.00025	0.0001	0.00025	0.00025	0.0001	0.00025	0.0001	0.00025	0.00025	0.00025	0.00025	0.00025
Standard Deviation *	0.00055	0.00097	0.0016	0.0008	0.00097	0.00055	0.00049	0.00043	0.00091	0.00043	0.00043	0.00043
Geometric Standard Deviation *	1.8	2.2	2.2	1.9	2.2	1.8	2.1	1.7	1.9	1.6	1.6	1.6
95% UCL (Student's-t) *	0.00054224	0.00053081	0.00101	0.00065195	0.00053081	0.00054224	0.00034101	0.00042516	0.00062616	0.00042763	0.00042763	0.00042763
Number of Env Standard Exceedances	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
% of Detects	0	0	0	0	0	0	0	0	0	0	0	0
% of Non-Detects	100	100	100	100	100	100	100	100	100	100	100	100
% of Detects at or above Env Standards	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

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Reported Analyte LOR is higher than Requested Analyte LOR



Appendix B
Table B6c
Historical Sediment Analytical Results - Summercloud Creek

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

	PFAS			PFAS - Sums			PFAS - Perfluoroalkyl Sulfonic Acids					
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	PFAS (Sum of Total)	Sum of PFHxS and PFOS	PFAS (Sum of Total)(WA DER List)	Perfluorobutane sulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.001	0.0002
0020_0021_Human health ceremonial				0.0002								

Catchment	SPR	Location	Field ID	Date	Lab Report No.											
Summercloud Creek	Receptor	0021_SD046	SC_SD01_0.0_180323	23 Mar 2018	ES1809241	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.0002
Summercloud Creek	Receptor	0021_SD046	0021_SD046_221012	12 Oct 2022	ES2237106	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.0002
Summercloud Creek	Receptor	0021_SD046	0021_SD046_230418	18 Apr 2023	ES2313364	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.0002
Summercloud Creek	Receptor	0021_SD046	0021_SD046_231017	17 Oct 2023	ES2336399	0.0002	<0.0002	<0.0002	0.0002	0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.0002
Summercloud Creek	Receptor	0021_SD046	0021_SD046_240409	09 Apr 2024	ES2411995	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.0002
Summercloud Creek	Receptor	0021_SD046	0021_QC155_241023	23 Oct 2024	ES2435078	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.0002
Summercloud Creek	Receptor	0021_SD046	0021_SD046_241023	23 Oct 2024	ES2435078	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.0002
Summercloud Creek	Receptor	0021_SD046	0021_SD046_250129	29 Jan 2025	ES2503552	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.0002
Summercloud Creek	Receptor	0021_SD046	0021_SD046_250401	01 Apr 2025	ES2510622	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.0002
Summercloud Creek	Receptor	0021_SD046	0021_SD046_251021	21 Oct 2025	ES2533521	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.0002
Summercloud Creek	Receptor	0021_SD188	0021_SD188_221221	21 Dec 2022	EW2205954	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.0002
Summercloud Creek	Receptor	0021_SD188	0021_SD188_241024	24 Oct 2024	ES2435541	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.0002
Summercloud Creek	Receptor	0021_SD188	0021_SD188_250403	03 Apr 2025	ES2510622	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.0002
Summercloud Creek	Receptor	0021_SD188	0021_SD188_A_250403	03 Apr 2025	ES2510622	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.0002
Summercloud Creek	Receptor	0021_SD188	0021_SD188_251021	21 Oct 2025	ES2533521	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.0002

Statistics													
Number of Results	15	15	15	15	15	15	15	15	15	15	15	15	15
Number of Detects	1	0	0	1	1	1	0	0	0	0	0	0	0
Minimum Concentration	0.0002	<0.0002	<0.0002	0.0002	0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.0002
Minimum Detect	0.0002	ND	ND	0.0002	0.0002	0.0002	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	0.0002	<0.0002	<0.0002	0.0002	0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.0002
Maximum Detect	0.0002	ND	ND	0.0002	0.0002	0.0002	ND	ND	ND	ND	ND	ND	ND
Average Concentration *	0.00011	0.0001	0.0001	0.00011	0.00011	0.00011	0.0001	0.0001	0.0001	0.0001	0.0001	0.0005	0.0001
Geometric Average *	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0005	0.0001
Median Concentration *	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0005	0.0001
Standard Deviation *	0.000026	0	0	0.000026	0.000026	0.000026	0	0	0	0	0	0	0
Geometric Standard Deviation *	1.2	1	1	1.2	1.2	1.2	1	1	1	1	1	1	1
95% UCL (Student's-t) *	0.00011841	0.0001	0.0001	0.00011841	0.00011841	0.00011841	0.0001	0.0001	0.0001	0.0001	0.0001	0.0005	0.0001
Number of Env Standard Exceedances	1	0	0	0	1	0	0	0	0	0	0	0	0
Number of Env Standard Exceedances (Detects Only)	1	0	0	0	1	0	0	0	0	0	0	0	0
% of Detects	7	0	0	7	7	7	0	0	0	0	0	0	0
% of Non-Detects	93	100	100	93	93	93	100	100	100	100	100	100	100
% of Detects at or above Env Standards	7	0	0	0	7	0	0	0	0	0	0	0	0
% of Results Below Env Standards or Non-Detect	93	100	100	100	93	100	100	100	100	100	100	100	100

* A Non Detect Multiplier of 0.5 has been applied.



Appendix B
Table B6c
Historical Sediment Analytical Results - Summercloud Creek

	PFAS - Perfluoroalkyl Carboxylic Acids								PFAS - I		
	Perfluorododecanoic acid (PFDoDA)	Perfluorooheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTTrDA)	Perfluoroundecanoic acid (PFUnDA)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Ethyl perfluorooctane sulfonamidooacetic acid (EtFOSAA)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)
EQL	0.0002	0.0002	0.0002	0.0002	0.0002	0.0005	0.0002	0.0002	0.0005	0.0002	0.0005
0020_0021_Human health ceremonial											

Catchment	SPR	Location	Field ID	Date	Lab Report No.											
Summercloud Creek	Receptor	0021_SD046	SC_SD01_0.0_180323	23 Mar 2018	ES1809241	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005
Summercloud Creek	Receptor	0021_SD046	0021_SD046_221012	12 Oct 2022	ES2237106	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005
Summercloud Creek	Receptor	0021_SD046	0021_SD046_230418	18 Apr 2023	ES2313364	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005
Summercloud Creek	Receptor	0021_SD046	0021_SD046_231017	17 Oct 2023	ES2336399	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005
Summercloud Creek	Receptor	0021_SD046	0021_SD046_240409	09 Apr 2024	ES2411995	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005
Summercloud Creek	Receptor	0021_SD046	0021_QC155_241023	23 Oct 2024	ES2435078	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005
Summercloud Creek	Receptor	0021_SD046	0021_SD046_241023	23 Oct 2024	ES2435078	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005
Summercloud Creek	Receptor	0021_SD046	0021_SD046_250129	29 Jan 2025	ES2503552	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005
Summercloud Creek	Receptor	0021_SD046	0021_SD046_250401	01 Apr 2025	ES2510622	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005
Summercloud Creek	Receptor	0021_SD046	0021_SD046_251021	21 Oct 2025	ES2533521	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005
Summercloud Creek	Receptor	0021_SD188	0021_SD188_221221	21 Dec 2022	EW2205954	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005
Summercloud Creek	Receptor	0021_SD188	0021_SD188_241024	24 Oct 2024	ES2435541	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005
Summercloud Creek	Receptor	0021_SD188	0021_SD188_250403	03 Apr 2025	ES2510622	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005
Summercloud Creek	Receptor	0021_SD188	0021_SD188_A_250403	03 Apr 2025	ES2510622	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005
Summercloud Creek	Receptor	0021_SD188	0021_SD188_251021	21 Oct 2025	ES2533521	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005

Statistics												
Number of Results	15	15	15	15	15	15	15	15	15	15	15	15
Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.00025	0.0001	0.0001	0.00025	0.0001	0.00025
Geometric Average *	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.00025	0.0001	0.0001	0.00025	0.0001	0.00025
Median Concentration *	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.00025	0.0001	0.0001	0.00025	0.0001	0.00025
Standard Deviation *	0	0	0	0	0	0	0	0	0	0	0	0
Geometric Standard Deviation *	1	1	1	1	1	1	1	1	1	1	1	1
95% UCL (Student's-t) *	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.00025	0.0001	0.0001	0.00025	0.0001	0.00025
Number of Env Standard Exceedances	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
% of Detects	0	0	0	0	0	0	0	0	0	0	0	0
% of Non-Detects	100	100	100	100	100	100	100	100	100	100	100	100
% of Detects at or above Env Standards	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

* A Non Detect Multiplier of 0.5 has been applied.



Appendix B
Table B6c
Historical Sediment Analytical Results - Summercloud Creek

	Perfluoroalkyl Sulfonamide				PFAS - Fluorotelomer Sulfonic Acids			
	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)
EQL	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
0020_0021_Human health ceremonial	0.0005	0.0002	0.0005	0.0002	0.0005	0.0005	0.0005	0.0005

Catchment	SPR	Location	Field ID	Date	Lab Report No.								
Summercloud Creek	Receptor	0021_SD046	SC_SD01_0.0_180323	23 Mar 2018	ES1809241	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Summercloud Creek	Receptor	0021_SD046	0021_SD046_221012	12 Oct 2022	ES2237106	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Summercloud Creek	Receptor	0021_SD046	0021_SD046_230418	18 Apr 2023	ES2313364	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Summercloud Creek	Receptor	0021_SD046	0021_SD046_231017	17 Oct 2023	ES2336399	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Summercloud Creek	Receptor	0021_SD046	0021_SD046_240409	09 Apr 2024	ES2411995	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Summercloud Creek	Receptor	0021_SD046	0021_QC155_241023	23 Oct 2024	ES2435078	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Summercloud Creek	Receptor	0021_SD046	0021_SD046_241023	23 Oct 2024	ES2435078	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Summercloud Creek	Receptor	0021_SD046	0021_SD046_250129	29 Jan 2025	ES2503552	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Summercloud Creek	Receptor	0021_SD046	0021_SD046_250401	01 Apr 2025	ES2510622	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Summercloud Creek	Receptor	0021_SD046	0021_SD046_251021	21 Oct 2025	ES2533521	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Summercloud Creek	Receptor	0021_SD188	0021_SD188_221221	21 Dec 2022	EW2205954	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Summercloud Creek	Receptor	0021_SD188	0021_SD188_241024	24 Oct 2024	ES2435541	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Summercloud Creek	Receptor	0021_SD188	0021_SD188_250403	03 Apr 2025	ES2510622	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Summercloud Creek	Receptor	0021_SD188	0021_SD188_A_250403	03 Apr 2025	ES2510622	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Summercloud Creek	Receptor	0021_SD188	0021_SD188_251021	21 Oct 2025	ES2533521	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005

Statistics								
Number of Results	15	15	15	15	15	15	15	15
Number of Detects	0	0	0	0	0	0	0	0
Minimum Concentration	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *	0.00025	0.0001	0.00025	0.0001	0.00025	0.00025	0.00025	0.00025
Geometric Average *	0.00025	0.0001	0.00025	0.0001	0.00025	0.00025	0.00025	0.00025
Median Concentration *	0.00025	0.0001	0.00025	0.0001	0.00025	0.00025	0.00025	0.00025
Standard Deviation *	0	0	0	0	0	0	0	0
Geometric Standard Deviation *	1	1	1	1	1	1	1	1
95% UCL (Student's-t) *	0.00025	0.0001	0.00025	0.0001	0.00025	0.00025	0.00025	0.00025
Number of Env Standard Exceedances	0	0	0	0	0	0	0	0
Number of Env Standard Exceedances (Detects Only)	0	0	0	0	0	0	0	0
% of Detects	0	0	0	0	0	0	0	0
% of Non-Detects	100	100	100	100	100	100	100	100
% of Detects at or above Env Standards	0	0	0	0	0	0	0	0
% of Results Below Env Standards or Non-Detect	100	100	100	100	100	100	100	100

* A Non Detect Multiplier of 0.5 has been applied.

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)	<30-200% RPD
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		
Table notes: 1. The 95% species protection level has been applied for slightly to moderately disturbed ecosystems. 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 (NEPC, 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 E.

C-1-2 Sampling analysis and 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. Trip blank analytical results are presented in Table C5.
- Rinsate: Rinsate samples are used to assess the quality of decontamination of sampling equipment between locations. Rinsate samples were analysed for PFAS. Rinsate analytical results are presented in Table C6.

C-1-3 Field QA/QC samples

Duplicate pairs are presented in Table C2 below. 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*.

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 (%)	
Water	Inter-laboratory	0020_MW109_251020	0020_QC240_251020	33	PFOS
Sediment	Intra-laboratory	0020_SD024_251020	0020_QC101_251020	41	PFOS
	Inter-laboratory	0021_SD018_251022	0021_QC226_251022	104	PFOS
		0020_SD024_251020	0020_QC201_251020	62	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 F.

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 differences (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% - 30%

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. The Eurofins acceptance criteria, indicates recoveries must lie between 70% and 130%.

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

Laboratory report type	Report number
Primary laboratory and report numbers:	ALS: ES2533546, ES2533521, ES2533538
Secondary laboratory and report numbers:	Eurofins: 1285219, 1285374

1. Field QA/QC sample collection	Media	Comments and DQI assessment
Number of Primary Samples analysed	76 (groundwater) 39 (surface water) 19 (sediment) 3 (tank samples)	-
Number of Days Sampling	4	October 20 to October 23
Intra-Laboratory Field Duplicates (1/10 samples)	Water: 18/119 = 15% Sediment: 2/20 = 10%	Sample frequency DQI met for Intra-laboratory and inter-laboratory duplicate samples.
Inter-Laboratory Field Duplicates (1/10 samples)	Water: 18/118 = 15% Sediment: 2/20 = 10%	
Trip Blanks (1/ batch)	3 (2 water, 1 sediment)	Sample frequency DQI met. Samples delivered on the same day to ALS are considered as one batch. One trip blank per media was submitted.
Trip Spikes (1/ batch)	-	Trip spike not required.
Rinsate Blanks (1/equipment/day)	16	Sample frequency DQI met. One rinsate per person per day was collected.
2. Sample Handling	Water and Sediment	Comments and DQI assessment
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	Samples received by the primary laboratory were below the recommended limit of 6.0 °C for chemical analysis. Samples received by the secondary laboratory were received above 6.0 °C for chemical analysis (7.5 °C to 13.1 °C). Ice was noted within the eskies indicating that the samples were likely below the recommended temperature for most of the transportation time. Additionally, PFAS species are less dependent on temperature to maintain sample integrity (i.e. not volatile organic compounds). Therefore, the warmer temperature is not expected to materially impact the conclusions of this assessment for samples within these lab reports.
Did the laboratory receive the samples in good condition	Yes	-
3. Precision/Accuracy Assessment	Water and Sediment	Comments and DQI assessment
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	-
Was the NATA Seal on the reports?	Yes	-
Did an authorised person sign the reports?	Yes	-
4. Field Duplicates assessment	Water and Sediment	Comments and DQI assessment
Were an adequate number of intra and inter-laboratory field duplicates analysed?	Yes	DQI met for sediment and water.
Were RPDs within Control limits?	Yes	Three primary samples had RPD exceedances as outlined in Table C2. GHD have confirmed with the field team that the standard operating procedures (SOPs) were followed, so variation is unlikely to be due to sampling procedure. 0020_MW109: Exceedances are potentially related to suspended sediment observed within the matrix during sample collection. 0021_SD018: Exceedances are potentially related to slight heterogeneity in the sediment matrix which could lead to variation in the concentration of PFAS in the sediment. 0020_SD024: Exceedances are potentially related to slight heterogeneity in the sediment matrix which could lead to variation in the concentration of PFAS in the sediment.
5. Trip Blanks/Rinsates	Water and Sediment	Comments and DQI assessment
Were an adequate number of trip blanks analysed?	Yes	-
Were an adequate number of rinsate blanks analysed?	Yes	One rinsate sample was collected per person per day where reusable equipment was used.
Were the trip blanks free of contamination?	Yes	-
Were the rinsate blanks free of contaminants? (If no, were contaminants present also detected in the samples/ are they common laboratory chemicals.)	Yes	-
6. Trip Spikes	Water and Sediment	Comments and DQI assessment
Were an adequate number of Trip Spikes analysed?	N/A	-
Were the Trip Spike results within control limits?	N/A	-
7. Laboratory Internal Quality Control Procedures – Pass/fail	Water and Sediment	Comments and DQI assessment
Method Blanks	Pass	DQI requirements met.
Matrix Spikes	Pass	ES2533546 Matrix spike recovery could not be determined as the background level was $\geq 4x$ the spike level in one anonymous soil sample for four PFAS compounds. ES2533521 Matrix spike recovery could not be determined as the background level was $\geq 4x$ the spike level in

		sample 0021_MW062_251022 for PFHxA, PFHxS, and PFOS. ES2533538 Matrix spike recovery was not able to be determined as the background level was $\geq 4x$ the spike level in one anonymous sample for PFOS. Comment: – The inability of the matrix spike to be determined indicates that the test was unsuccessful due to high concentrations in the matrix compared to the laboratory added spike. – All other matrix recovery samples were successfully determined and were within control limits. – Anonymous samples are not representative of the sample matrix for samples collected at the site. – All laboratory control spikes were within control limits. As such, the inability of the lab to determine matrix spike is not considered to impact on the outcome of this investigation, or interpretation of this round of data.
Laboratory Control Samples/Spikes	Pass	DQI requirements met.
Laboratory Duplicates	Pass	1285374 One sample laboratory duplicate sample for PFOS was outside the control limits, however, Eurofins noted that the samples “passes Eurofins Environment Testing's QC - Acceptance Criteria” Comment: All other laboratory duplicates were outside control limits. This duplicate non-conformance was at the secondary laboratory where inter-laboratory field duplicates were spent. As such, this one non-conformance is not considered to impact on the outcome of this investigation, or interpretation of this round of data.
Surrogates	Pass	DQI requirements met.
Frequency of Quality Control Samples	Pass	ES2533546 Frequency of laboratory duplicate water samples for PFAS analysis was not met. Expected rate = 10%, actual rate = 0%. Frequency of matrix spike water samples for PFAS analysis was not met. Expected rate = 10%, actual rate = 0%. ES233538 Frequency of laboratory duplicate soil samples for moisture content analysis was not met. Expected rate = 10%, actual rate = 7.41% Frequency of laboratory duplicate water samples for PFAS analysis was not met. Expected rate = 10%, actual rate = 8.62%. Comment Despite coordination with lab and field collection of sufficient sample volume for internal laboratory QC

		analysis, the laboratory split the batches in a way that resulted in insufficient sample volume available for two batches. This is not expected to have a material outcome on the validity of the results of this monitoring round as the remaining batches are compliant and laboratory quality control tests were within 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			-

Data Usability		Comments
~~Data Directly Usable~~		
Data Usable with the following qualifications	X	On balance of the above, assessment data is considered adequate for the purpose of the investigation, noting that the maximum value of duplicate pairs should be used for assessment.
~~Data Not Usable~~		

QA/QC Report Prepared by: Andrew Duval

QA/QC Report Checked by: Helen Milne



Appendix C
Table C4a
Water Relative Percentage
Differences

Location Code Sample Type Field ID Lab Report Number Date Matrix Type			0020_SW037	0020_SW037	RPD	0020_SW037	0020_SW037	RPD	0020_SW057	0020_SW057	RPD	0020_SW057	0020_SW057	RPD	0020_SW026	0020_SW026	RPD
			Normal	Field_D		Normal	Interlab_D		Normal	Field_D		Normal	Interlab_D		Normal	Field_D	
			0020_SW037_251020	0020_QC100_251020		0020_SW037_251020	0020_QC200_251020		0020_SW057_251020	0020_QC160_251020		0020_SW057_251020	0020_QC260_251020		0020_SW026_251020	0020_QC120_251020	
			ES2533546	ES2533546		ES2533546	1285219		ES2533546	ES2533546		ES2533546	1285219		ES2533546	ES2533546	
			20 Oct 2025	20 Oct 2025		20 Oct 2025	20 Oct 2025		20 Oct 2025	20 Oct 2025		20 Oct 2025	20 Oct 2025		20 Oct 2025	20 Oct 2025	
			Water	Water		Water	Water		Water	Water		Water	Water		Water	Water	
	Unit	EQL															
PFAS - Perfluoroalkyl Sulfonic Acids																	
Perfluorobutane sulfonic acid (PFBS)	µg/L	0.01	0.03	0.03	0	0.03	0.02	40	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluorodecanesulfonic acid (PFDS)	µg/L	0.01	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluorononane sulfonate (PFNS)	µg/L	0.01	-	-	-	-	<0.01	-	-	-	-	-	0.04	-	-	-	-
Perfluoroheptane sulfonic acid (PFHpS)	µg/L	0.01	<0.02	<0.02	0	<0.02	0.01 ^{#1}	0	<0.02	<0.02	0	<0.02	0.02 ^{#1}	0	<0.02	<0.02	0
Perfluorooctane sulfonic acid (PFOS)	µg/L	0.01	0.35	0.34	3	0.35	0.37 ^{#1}	6	0.95	0.82	15	0.95	1.0 ^{#1}	5	0.01	<0.01	0
Perfluoropropanesulfonic acid (PFPrS)	µg/L	0.01	-	-	-	-	<0.01	-	-	-	-	-	<0.01	-	-	-	-
Perfluoropentane sulfonic acid (PFPeS)	µg/L	0.01	<0.02	<0.02	0	<0.02	0.02 ^{#1}	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluorohexane sulfonic acid (PFHxS)	µg/L	0.01	0.14	0.22	44	0.14	0.22 ^{#1}	44	0.20	0.17	16	0.20	0.17 ^{#1}	16	<0.01	<0.01	0
PFAS - Perfluoroalkyl Carboxylic Acids																	
Perfluorobutanoic acid (PFBA)	µg/L	0.05	<0.1	<0.1	0	<0.1	<0.05	0	<0.1	<0.1	0	<0.1	<0.05	0	<0.1	<0.1	0
Perfluorodecanoic acid (PFDA)	µg/L	0.01	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluorododecanoic acid (PFDoDA)	µg/L	0.01	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluoroheptanoic acid (PFHpA)	µg/L	0.01	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluorohexanoic acid (PFHxA)	µg/L	0.01	<0.02	0.04	67	<0.02	0.03	40	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluorononanoic acid (PFNA)	µg/L	0.01	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluorooctanoic acid (PFOA)	µg/L	0.01	0.01	0.02	67	0.01	0.02 ^{#1}	67	0.01	<0.01	0	0.01	<0.01	0	<0.01	<0.01	0
Perfluoropentanoic acid (PFPeA)	µg/L	0.01	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.01	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.01	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluoroundecanoic acid (PFUnDA)	µg/L	0.01	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0
PFAS - Perfluoroalkyl Sulfonamide																	
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	µg/L	0.02	<0.02	<0.02	0	<0.02	<0.05	0	<0.02	<0.02	0	<0.02	<0.05	0	<0.02	<0.02	0
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
N-Methyl perfluorooctane sulfonamide (MeFOSA)	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	µg/L	0.02	<0.02	<0.02	0	<0.02	<0.05	0	<0.02	<0.02	0	<0.02	<0.05	0	<0.02	<0.02	0
N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.02	<0.02	<0.02	0	<0.02	<0.05	0	<0.02	<0.02	0	<0.02	<0.05	0	<0.02	<0.02	0
PFAS - Fluorotelomer Sulfonic Acids																	
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	µg/L	0.01	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0
6:2 Fluorotelomer Sulfonate (6:2 FTS)	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	µg/L	0.01	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	µg/L	0.01	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0

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.

*RPDs have only been considered where a concentration is greater than 1 times the EQL.

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 200 (1 - 10 x EQL); 50 (10 - 30 x EQL); 30 (> 30 x EQL))

***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory



Location Code Sample Type Field ID Lab Report Number Date Matrix Type			0020_SW026	0020_SW026	RPD	0020_MW070	0020_MW070	RPD	0020_MW070	0020_MW070	RPD	0020_MW055	0020_MW055	RPD	0020_MW055	0020_MW055	RPD
			Normal	Interlab_D		Normal	Field_D		Normal	Interlab_D		Normal	Field_D		Normal	Interlab_D	
			0020_SW026_251020	0020_QC220_251020		0020_MW070_251020	0020_QC121_251020		0020_MW070_251020	0020_QC221_251020		0020_MW055_251020	0020_QC122_251020		0020_MW055_251020	0020_QC222_251020	
			ES2533546	1285219		ES2533546	ES2533546		ES2533546	1285219		ES2533546	ES2533546		ES2533546	1285219	
			20 Oct 2025	20 Oct 2025		20 Oct 2025	20 Oct 2025		20 Oct 2025	20 Oct 2025		20 Oct 2025	20 Oct 2025		20 Oct 2025	20 Oct 2025	
			Water	Water		Water	Water		Water	Water		Water	Water		Water	Water	
	Unit	EQL															
PFAS - Perfluoroalkyl Sulfonic Acids																	
Perfluorobutane sulfonic acid (PFBS)	µg/L	0.01	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0
Perfluorodecanesulfonic acid (PFDS)	µg/L	0.01	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0
Perfluorononane sulfonate (PFNS)	µg/L	0.01	-	<0.01	-	-	-	-	-	<0.01	-	-	-	-	-	<0.01	-
Perfluoroheptane sulfonic acid (PFHpS)	µg/L	0.01	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	0.02 ^{#1}	0	<0.02	<0.02	0	<0.02	<0.01	0
Perfluorooctane sulfonic acid (PFOS)	µg/L	0.01	0.01	0.01 ^{#1}	0	0.34	0.41	19	0.34	0.43 ^{#1}	23	0.04	0.05	22	0.04	0.05 ^{#1}	22
Perfluoropropanesulfonic acid (PFPrS)	µg/L	0.01	-	<0.01	-	-	-	-	-	<0.01	-	-	-	-	-	<0.01	-
Perfluoropentane sulfonic acid (PFPeS)	µg/L	0.01	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0
Perfluorohexane sulfonic acid (PFHxS)	µg/L	0.01	<0.01	<0.01	0	0.08	0.08	0	0.08	0.07 ^{#1}	13	0.06	0.05	18	0.06	0.06 ^{#1}	0
PFAS - Perfluoroalkyl Carboxylic Acids																	
Perfluorobutanoic acid (PFBA)	µg/L	0.05	<0.1	<0.05	0	<0.1	<0.1	0	<0.1	<0.05	0	<0.1	<0.1	0	<0.1	<0.05	0
Perfluorodecanoic acid (PFDA)	µg/L	0.01	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0
Perfluorododecanoic acid (PFDoDA)	µg/L	0.01	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0
Perfluoroheptanoic acid (PFHpA)	µg/L	0.01	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0
Perfluorohexanoic acid (PFHxA)	µg/L	0.01	<0.02	<0.01	0	0.02	0.02	0	0.02	0.02	0	<0.02	<0.02	0	<0.02	<0.01	0
Perfluorononanoic acid (PFNA)	µg/L	0.01	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0
Perfluorooctanoic acid (PFOA)	µg/L	0.01	<0.01	<0.01	0	<0.01	<0.01	0	<0.01	<0.01	0	<0.01	<0.01	0	<0.01	<0.01	0
Perfluoropentanoic acid (PFPeA)	µg/L	0.01	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.01	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.01	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0
Perfluoroundecanoic acid (PFUnDA)	µg/L	0.01	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0
PFAS - Perfluoroalkyl Sulfonamide																	
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	µg/L	0.02	<0.02	<0.05	0	<0.02	<0.02	0	<0.02	<0.05	0	<0.02	<0.02	0	<0.02	<0.05	0
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
N-Methyl perfluorooctane sulfonamide (MeFOSA)	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	µg/L	0.02	<0.02	<0.05	0	<0.02	<0.02	0	<0.02	<0.05	0	<0.02	<0.02	0	<0.02	<0.05	0
N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.02	<0.02	<0.05	0	<0.02	<0.02	0	<0.02	<0.05	0	<0.02	<0.02	0	<0.02	<0.05	0
PFAS - Fluorotelomer Sulfonic Acids																	
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	µg/L	0.01	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0
6:2 Fluorotelomer Sulfonate (6:2 FTS)	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	µg/L	0.01	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	µg/L	0.01	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0

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.

*RPDs have only been considered where a concentration is greater than 1 times the EQL.

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 200 (1 - 10 x EQL); 50 (10 - 30 x EQL); 30 (> 30 x EQL))

***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory



Location Code	Sample Type	Field ID	Lab Report Number	Date	Matrix Type	0020_MW109	0020_MW109	RPD	0020_MW109	0020_MW109	RPD	0021_SW043	0021_SW043	RPD	0021_SW043	0021_SW043	RPD	0021_SW058	0021_SW058	RPD
						Normal	Field_D		Normal	Interlab_D		Normal	Field_D		Normal	Interlab_D		Normal	Field_D	
						0020_MW109_251020	0020_QC140_251020		0020_MW109_251020	0020_QC240_251020		0021_SW043_251021	0021_QC102_251021		0021_SW043_251021	0021_QC202_251021		0021_SW058_251021	0021_QC161_251021	
						ES2533546	ES2533546		ES2533546	1285219		ES2533538	ES2533538		ES2533538	1285374		ES2533538	ES2533538	
						20 Oct 2025	20 Oct 2025		20 Oct 2025	20 Oct 2025		21 Oct 2025	21 Oct 2025		21 Oct 2025	21 Oct 2025		21 Oct 2025	21 Oct 2025	
						Water	Water		Water	Water		Water	Water		Water	Water		Water	Water	
	Unit	EQL																		
PFAS - Perfluoroalkyl Sulfonic Acids																				
Perfluorobutane sulfonic acid (PFBS)	µg/L	0.01	<0.02	<0.02	0	<0.02	0.01	0	<0.02	<0.02	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluorodecanesulfonic acid (PFDS)	µg/L	0.01	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluorononane sulfonate (PFNS)	µg/L	0.01	-	-	-	-	-	-	<0.01	-	-	-	-	-	-	<0.01	-	-	-	-
Perfluoroheptane sulfonic acid (PFHpS)	µg/L	0.01	0.02	0.02	0	0.02	0.04 ^{#1}	67	<0.02	<0.02	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluorooctane sulfonic acid (PFOS)	µg/L	0.01	0.66	0.80	19	0.66	0.92 ^{#1}	33	0.18	0.17	6	0.18	0.15 ^{#1}	18	<0.01	<0.01	<0.01	<0.01	<0.01	0
Perfluoropropanesulfonic acid (PFPrS)	µg/L	0.01	-	-	-	-	<0.01	-	-	-	-	-	<0.01	-	-	-	-	-	-	-
Perfluoropentane sulfonic acid (PFPeS)	µg/L	0.01	<0.02	<0.02	0	<0.02	0.01 ^{#1}	0	<0.02	<0.02	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluorohexane sulfonic acid (PFHxS)	µg/L	0.01	0.28	0.29	4	0.28	0.27 ^{#1}	4	0.10	0.09	11	0.10	0.08 ^{#1}	22	<0.01	<0.01	<0.01	<0.01	<0.01	0
PFAS - Perfluoroalkyl Carboxylic Acids																				
Perfluorobutanoic acid (PFBA)	µg/L	0.05	<0.1	<0.1	0	<0.1	<0.05	0	<0.1	<0.1	0	<0.1	<0.05	0	<0.1	<0.05	0	<0.1	<0.1	0
Perfluorodecanoic acid (PFDA)	µg/L	0.01	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluorododecanoic acid (PFDoDA)	µg/L	0.01	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluoroheptanoic acid (PFHpA)	µg/L	0.01	<0.02	<0.02	0	<0.02	0.01 ^{#1}	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluorohexanoic acid (PFHxA)	µg/L	0.01	0.06	0.06	0	0.06	0.05	18	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluorononanoic acid (PFNA)	µg/L	0.01	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluorooctanoic acid (PFOA)	µg/L	0.01	0.02	0.02	0	0.02	0.02 ^{#1}	0	<0.01	<0.01	0	<0.01	<0.01	0	<0.01	<0.01	0	<0.01	<0.01	0
Perfluoropentanoic acid (PFPeA)	µg/L	0.01	<0.02	<0.02	0	<0.02	0.02	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.01	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.01	0	<0.05	<0.05	0
Perfluorotridecanoic acid (PFTriDA)	µg/L	0.01	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluoroundecanoic acid (PFUnDA)	µg/L	0.01	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.01	0	<0.02	<0.02	0
PFAS - Perfluoroalkyl Sulfonamide																				
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	µg/L	0.02	<0.02	<0.02	0	<0.02	<0.05	0	<0.02	<0.02	0	<0.02	<0.05	0	<0.02	<0.05	0	<0.02	<0.02	0
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
N-Methyl perfluorooctane sulfonamide (MeFOSA)	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	µg/L	0.02	<0.02	<0.02	0	<0.02	<0.05	0	<0.02	<0.02	0	<0.02	<0.05	0	<0.02	<0.05	0	<0.02	<0.02	0
N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.02	<0.02	<0.02	0	<0.02	<0.05	0	<0.02	<0.02	0	<0.02	<0.02	0	<0.02	<0.05	0	<0.02	<0.02	0
PFAS - Fluorotelomer Sulfonic Acids																				
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	µg/L	0.01	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.01	0	<0.05	<0.05	0
6:2 Fluorotelomer Sulfonate (6:2 FTS)	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	µg/L	0.01	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.01	0	<0.05	<0.05	0
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	µg/L	0.01	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.01	0	<0.05	<0.05	0

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.

*RPDs have only been considered where a concentration is greater than 1 times the EQL.

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 200 (1 - 10 x EQL); 50 (10 - 30 x EQL); 30 (> 30 x EQL))

***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory



Location Code Sample Type Field ID Lab Report Number Date Matrix Type			0021_SW058	0021_SW058	RPD	0021_MW133	0021_MW133	RPD	0021_MW133	0021_MW133	RPD	0021_MW028	0021_MW028	RPD	0021_MW028	0021_MW028	RPD
			Normal	Interlab_D		Normal	Field_D		Normal	Interlab_D		Normal	Field_D		Normal	Interlab_D	
			0021_SW058_251021	0021_QC261_251021		0021_MW133_251021	0021_QC103_251021		0021_MW133_251021	0021_QC203_251021		0021_MW028_251021	0021_QC123_251021		0021_MW028_251021	0021_QC223_251021	
			ES2533538	1285374		ES2533521	ES2533538		ES2533521	1285374		ES2533521	ES2533538		ES2533521	1285374	
			21 Oct 2025	21 Oct 2025		21 Oct 2025	21 Oct 2025		21 Oct 2025	21 Oct 2025		21 Oct 2025	21 Oct 2025		21 Oct 2025	21 Oct 2025	
			Water	Water		Water	Water		Water	Water		Water	Water		Water	Water	
	Unit	EQL															
PFAS - Perfluoroalkyl Sulfonic Acids																	
Perfluorobutane sulfonic acid (PFBS)	µg/L	0.01	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0
Perfluorodecanesulfonic acid (PFDS)	µg/L	0.01	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0
Perfluorononane sulfonate (PFNS)	µg/L	0.01	-	<0.01	-	-	-	-	-	<0.01	-	-	-	-	-	<0.01	-
Perfluoroheptane sulfonic acid (PFHpS)	µg/L	0.01	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0
Perfluorooctane sulfonic acid (PFOS)	µg/L	0.01	<0.01	<0.01	0	<0.01	<0.01	0	<0.01	<0.01	0	0.03	0.04	29	0.03	0.07 ^{#1}	80
Perfluoropropanesulfonic acid (PFPrS)	µg/L	0.01	-	<0.01	-	-	-	-	-	<0.01	-	-	-	-	-	<0.01	-
Perfluoropentane sulfonic acid (PFPeS)	µg/L	0.01	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0
Perfluorohexane sulfonic acid (PFHxS)	µg/L	0.01	<0.01	<0.01	0	<0.01	<0.01	0	<0.01	<0.01	0	0.04	0.04	0	0.04	0.04 ^{#1}	0
PFAS - Perfluoroalkyl Carboxylic Acids																	
Perfluorobutanoic acid (PFBA)	µg/L	0.05	<0.1	<0.05	0	<0.1	<0.1	0	<0.1	<0.05	0	<0.1	<0.1	0	<0.1	<0.05	0
Perfluorodecanoic acid (PFDA)	µg/L	0.01	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0
Perfluorododecanoic acid (PFDoDA)	µg/L	0.01	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0
Perfluoroheptanoic acid (PFHpA)	µg/L	0.01	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0
Perfluorohexanoic acid (PFHxA)	µg/L	0.01	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	0.02	0	<0.02	0.01	0
Perfluorononanoic acid (PFNA)	µg/L	0.01	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0
Perfluorooctanoic acid (PFOA)	µg/L	0.01	<0.01	<0.01	0	<0.01	<0.01	0	<0.01	<0.01	0	<0.01	<0.01	0	<0.01	<0.01	0
Perfluoropentanoic acid (PFPeA)	µg/L	0.01	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.01	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.01	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0
Perfluoroundecanoic acid (PFUnDA)	µg/L	0.01	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0
PFAS - Perfluoroalkyl Sulfonamide																	
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	µg/L	0.02	<0.02	<0.05	0	<0.02	<0.02	0	<0.02	<0.05	0	<0.02	<0.02	0	<0.02	<0.05	0
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
N-Methyl perfluorooctane sulfonamide (MeFOSA)	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	µg/L	0.02	<0.02	<0.05	0	<0.02	<0.02	0	<0.02	<0.05	0	<0.02	<0.02	0	<0.02	<0.05	0
N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.02	<0.02	<0.05	0	<0.02	<0.02	0	<0.02	<0.05	0	<0.02	<0.02	0	<0.02	<0.05	0
PFAS - Fluorotelomer Sulfonic Acids																	
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	µg/L	0.01	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0
6:2 Fluorotelomer Sulfonate (6:2 FTS)	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	µg/L	0.01	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	µg/L	0.01	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0

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.

*RPDs have only been considered where a concentration is greater than 1 times the EQL.

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 200 (1 - 10 x EQL); 50 (10 - 30 x EQL); 30 (> 30 x EQL))

***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory



Location Code Sample Type Field ID Lab Report Number Date Matrix Type			0021_MW118	0021_MW118	RPD	0021_MW118	0021_MW118	RPD	0021_MW021	0021_MW021	RPD	0021_MW021	0021_MW021	RPD	0021_SW188	0021_SW188	RPD
			Normal	Field_D		Normal	Interlab_D		Normal	Field_D		Normal	Interlab_D		Normal	Field_D	
			0021_MW118_251021	0021_QC140_251021		0021_MW118_251021	0021_QC240_251021		0021_MW021_251021	0021_QC124_251021		0021_MW021_251021	0021_QC224_251021		0021_SW188_251021	0021_QC162_251021	
			ES2533521	ES2533538		ES2533521	1285374		ES2533521	ES2533538		ES2533521	1285374		ES2533538	ES2533538	
			21 Oct 2025	21 Oct 2025		21 Oct 2025	21 Oct 2025		21 Oct 2025	21 Oct 2025		21 Oct 2025	21 Oct 2025		21 Oct 2025	21 Oct 2025	
			Water	Water		Water	Water		Water	Water		Water	Water		Water	Water	
	Unit	EQL															
PFAS - Perfluoroalkyl Sulfonic Acids																	
Perfluorobutane sulfonic acid (PFBS)	µg/L	0.01	<0.02	<0.02	0	<0.02	0.02	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluorodecanesulfonic acid (PFDS)	µg/L	0.01	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluorononane sulfonate (PFNS)	µg/L	0.01	-	-	-	-	<0.01	-	-	-	-	-	<0.01	-	-	-	-
Perfluoroheptane sulfonic acid (PFHpS)	µg/L	0.01	<0.02	<0.02	0	<0.02	0.01 ^{#1}	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluorooctane sulfonic acid (PFOS)	µg/L	0.01	0.44	0.42	5	0.44	0.45 ^{#1}	2	<0.01	<0.01	0	<0.01	<0.01	0	<0.01	<0.01	0
Perfluoropropanesulfonic acid (PFPrS)	µg/L	0.01	-	-	-	-	<0.01	-	-	-	-	-	<0.01	-	-	-	-
Perfluoropentane sulfonic acid (PFPeS)	µg/L	0.01	0.04	0.03	29	0.04	0.03 ^{#1}	29	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluorohexane sulfonic acid (PFHxS)	µg/L	0.01	0.50	0.50	0	0.50	0.46 ^{#1}	8	<0.01	<0.01	0	<0.01	<0.01	0	0.01	<0.01	0
PFAS - Perfluoroalkyl Carboxylic Acids																	
Perfluorobutanoic acid (PFBA)	µg/L	0.05	<0.1	<0.1	0	<0.1	<0.05	0	<0.1	<0.1	0	<0.1	<0.05	0	<0.1	<0.1	0
Perfluorodecanoic acid (PFDA)	µg/L	0.01	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluorododecanoic acid (PFDoDA)	µg/L	0.01	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluoroheptanoic acid (PFHpA)	µg/L	0.01	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluorohexanoic acid (PFHxA)	µg/L	0.01	0.02	0.03	40	0.02	0.03	40	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluorononanoic acid (PFNA)	µg/L	0.01	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluorooctanoic acid (PFOA)	µg/L	0.01	<0.01	0.01	0	<0.01	<0.01	0	<0.01	<0.01	0	<0.01	<0.01	0	<0.01	<0.01	0
Perfluoropentanoic acid (PFPeA)	µg/L	0.01	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.01	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.01	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluoroundecanoic acid (PFUnDA)	µg/L	0.01	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0
PFAS - Perfluoroalkyl Sulfonamide																	
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	µg/L	0.02	<0.02	<0.02	0	<0.02	<0.05	0	<0.02	<0.02	0	<0.02	<0.05	0	<0.02	<0.02	0
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
N-Methyl perfluorooctane sulfonamide (MeFOSA)	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	µg/L	0.02	<0.02	<0.02	0	<0.02	<0.05	0	<0.02	<0.02	0	<0.02	<0.05	0	<0.02	<0.02	0
N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.02	<0.02	<0.02	0	<0.02	<0.05	0	<0.02	<0.02	0	<0.02	<0.05	0	<0.02	<0.02	0
PFAS - Fluorotelomer Sulfonic Acids																	
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	µg/L	0.01	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0
6:2 Fluorotelomer Sulfonate (6:2 FTS)	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	µg/L	0.01	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	µg/L	0.01	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0

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.

*RPDs have only been considered where a concentration is greater than 1 times the EQL.

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 200 (1 - 10 x EQL); 50 (10 - 30 x EQL); 30 (> 30 x EQL))

***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory



Location Code Sample Type Field ID Lab Report Number Date Matrix Type			0021_SW188	0021_SW188	RPD	0021_MW136	0021_MW136	RPD	0021_MW136	0021_MW136	RPD	0021_OTH006	0021_OTH006	RPD	0021_OTH006	0021_OTH006	RPD
			Normal	Interlab_D		Normal	Field_D		Normal	Interlab_D		Normal	Field_D		Normal	Interlab_D	
			0021_SW188_251021	0021_QC262_251021		0021_MW136_251022	0021_QC141_251022		0021_MW136_251022	0021_QC241_251022		0021_OTH006_251022	0021_QC104_251022		0021_OTH006_251022	0021_QC204_251022	
			ES2533538	1285374		ES2533521	ES2533538		ES2533521	1285374		ES2533521	ES2533538		ES2533521	1285374	
			21 Oct 2025	21 Oct 2025		22 Oct 2025	22 Oct 2025		22 Oct 2025	22 Oct 2025		22 Oct 2025	22 Oct 2025		22 Oct 2025	22 Oct 2025	
			Water	Water		Water	Water		Water	Water		Water	Water		Water	Water	
	Unit	EQL															
PFAS - Perfluoroalkyl Sulfonic Acids																	
Perfluorobutane sulfonic acid (PFBS)	µg/L	0.01	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	0.02	0
Perfluorodecanesulfonic acid (PFDS)	µg/L	0.01	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0
Perfluorononane sulfonate (PFNS)	µg/L	0.01	-	<0.01	-	-	-	-	-	<0.01	-	-	-	-	-	<0.01	-
Perfluoroheptane sulfonic acid (PFHpS)	µg/L	0.01	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0
Perfluorooctane sulfonic acid (PFOS)	µg/L	0.01	<0.01	<0.01	0	<0.01	<0.01	0	<0.01	<0.01	0	<0.01	<0.01	0	<0.01	<0.01	0
Perfluoropropanesulfonic acid (PFPrS)	µg/L	0.01	-	<0.01	-	-	-	-	-	<0.01	-	-	-	-	-	<0.01	-
Perfluoropentane sulfonic acid (PFPeS)	µg/L	0.01	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0
Perfluorohexane sulfonic acid (PFHxS)	µg/L	0.01	0.01	0.01#1	0	<0.01	<0.01	0	<0.01	<0.01	0	<0.01	<0.01	0	<0.01	<0.01	0
PFAS - Perfluoroalkyl Carboxylic Acids																	
Perfluorobutanoic acid (PFBA)	µg/L	0.05	<0.1	<0.05	0	<0.1	<0.1	0	<0.1	<0.05	0	<0.1	<0.1	0	<0.1	<0.05	0
Perfluorodecanoic acid (PFDA)	µg/L	0.01	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0
Perfluorododecanoic acid (PFDoDA)	µg/L	0.01	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0
Perfluoroheptanoic acid (PFHpA)	µg/L	0.01	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0
Perfluorohexanoic acid (PFHxA)	µg/L	0.01	<0.02	0.06	100	<0.02	<0.02	0	<0.02	<0.01	0	0.03	0.03	0	0.03	0.03	0
Perfluorononanoic acid (PFNA)	µg/L	0.01	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0
Perfluorooctanoic acid (PFOA)	µg/L	0.01	<0.01	0.01#1	0	<0.01	<0.01	0	<0.01	<0.01	0	<0.01	<0.01	0	<0.01	<0.01	0
Perfluoropentanoic acid (PFPeA)	µg/L	0.01	<0.02	0.02	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	0.01	0
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.01	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0
Perfluorotridecanoic acid (PFTriDA)	µg/L	0.01	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0
Perfluoroundecanoic acid (PFUnDA)	µg/L	0.01	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0
PFAS - Perfluoroalkyl Sulfonamide																	
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	µg/L	0.02	<0.02	<0.05	0	<0.02	<0.02	0	<0.02	<0.05	0	<0.02	<0.02	0	<0.02	<0.05	0
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
N-Methyl perfluorooctane sulfonamide (MeFOSA)	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	µg/L	0.02	<0.02	<0.05	0	<0.02	<0.02	0	<0.02	<0.05	0	<0.02	<0.02	0	<0.02	<0.05	0
N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.02	<0.02	<0.05	0	<0.02	<0.02	0	<0.02	<0.05	0	<0.02	<0.02	0	<0.02	<0.05	0
PFAS - Fluorotelomer Sulfonic Acids																	
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	µg/L	0.01	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0
6:2 Fluorotelomer Sulfonate (6:2 FTS)	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	µg/L	0.01	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	µg/L	0.01	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0

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.

*RPDs have only been considered where a concentration is greater than 1 times the EQL.

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 200 (1 - 10 x EQL); 50 (10 - 30 x EQL); 30 (> 30 x EQL))

***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory



Location Code	Sample Type	Field ID	Lab Report Number	Date	Matrix Type	0021_MW064	0021_MW064	RPD	0021_MW064	0021_MW064	RPD	0020_MW007	0020_MW007	RPD	0020_MW007	0020_MW007	RPD	0021_MW108	0021_MW108	RPD
						Normal	Field_D		Normal	Interlab_D		Normal	Field_D		Normal	Interlab_D		Normal	Field_D	
						0021_MW064_251022	0021_QC165_251022		0021_MW064_251022	0021_QC265_251022		0020_MW007_251023	0020_QC105_251023		0020_MW007_251023	0020_QC205_251023		0021_MW108_251023	0021_QC166_251023	
						ES2533521	ES2533538		ES2533521	1285374		ES2533546	ES2533546		ES2533546	1285219		ES2533521	ES2533538	
						22 Oct 2025	22 Oct 2025		22 Oct 2025	22 Oct 2025		23 Oct 2025	23 Oct 2025		23 Oct 2025	23 Oct 2025		23 Oct 2025	23 Oct 2025	
						Water	Water		Water	Water		Water	Water		Water	Water		Water	Water	
Unit	EQL																			
PFAS - Perfluoroalkyl Sulfonic Acids																				
Perfluorobutane sulfonic acid (PFBS)	µg/L	0.01	0.08	0.10	22	0.08	0.09	12	<0.02	<0.02	0	<0.02	<0.01	0	0.15	0.15	0			
Perfluorodecanesulfonic acid (PFDS)	µg/L	0.01	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0			
Perfluorononane sulfonate (PFNS)	µg/L	0.01	-	-	-	-	<0.01	-	-	-	-	-	-	-	-	-	-	-	-	-
Perfluoroheptane sulfonic acid (PFHpS)	µg/L	0.01	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	0.12	0.12	0			
Perfluorooctane sulfonic acid (PFOS)	µg/L	0.01	0.28	0.28	0	0.28	0.30 ^{#1}	7	0.10	0.16	46	0.10	0.11 ^{#1}	10	3.80	4.05	6			
Perfluoropropanesulfonic acid (PFPrS)	µg/L	0.01	-	-	-	-	0.04	-	-	-	-	-	<0.01	-	-	-	-	-	-	-
Perfluoropentane sulfonic acid (PFPeS)	µg/L	0.01	0.10	0.10	0	0.10	0.08 ^{#1}	22	<0.02	<0.02	0	<0.02	<0.01	0	0.22	0.22	0			
Perfluorohexane sulfonic acid (PFHxS)	µg/L	0.01	0.32	0.36	12	0.32	0.33 ^{#1}	3	0.08	0.08	0	0.08	0.08 ^{#1}	0	2.91	3.21	10			
PFAS - Perfluoroalkyl Carboxylic Acids																				
Perfluorobutanoic acid (PFBA)	µg/L	0.05	<0.1	<0.1	0	<0.1	<0.05	0	<0.1	<0.1	0	<0.1	<0.05	0	<0.1	<0.1	0			
Perfluorodecanoic acid (PFDA)	µg/L	0.01	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0			
Perfluorododecanoic acid (PFDoDA)	µg/L	0.01	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0			
Perfluoroheptanoic acid (PFHpA)	µg/L	0.01	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	0.06	0.05	18			
Perfluorohexanoic acid (PFHxA)	µg/L	0.01	0.06	0.06	0	0.06	0.06	0	<0.02	<0.02	0	<0.02	<0.01	0	0.43	0.43	0			
Perfluorononanoic acid (PFNA)	µg/L	0.01	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0			
Perfluorooctanoic acid (PFOA)	µg/L	0.01	<0.01	0.01	0	<0.01	<0.01	0	<0.01	<0.01	0	<0.01	<0.01	0	0.12	0.12	0			
Perfluoropentanoic acid (PFPeA)	µg/L	0.01	<0.02	<0.02	0	<0.02	0.02	0	<0.02	<0.02	0	<0.02	<0.01	0	0.08	0.10	22			
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.01	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0			
Perfluorotridecanoic acid (PFTriDA)	µg/L	0.01	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0			
Perfluoroundecanoic acid (PFUnDA)	µg/L	0.01	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0			
PFAS - Perfluoroalkyl Sulfonamide																				
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0			
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	µg/L	0.02	<0.02	<0.02	0	<0.02	<0.05	0	<0.02	<0.02	0	<0.02	<0.05	0	<0.02	<0.02	0			
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0			
N-Methyl perfluorooctane sulfonamide (MeFOSA)	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0			
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	µg/L	0.02	<0.02	<0.02	0	<0.02	<0.05	0	<0.02	<0.02	0	<0.02	<0.05	0	<0.02	<0.02	0			
N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0			
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.02	<0.02	<0.02	0	<0.02	<0.05	0	<0.02	<0.02	0	<0.02	<0.05	0	<0.02	<0.02	0			
PFAS - Fluorotelomer Sulfonic Acids																				
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	µg/L	0.01	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0			
6:2 Fluorotelomer Sulfonate (6:2 FTS)	µg/L	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0			
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	µg/L	0.01	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0			
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	µg/L	0.01	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0			

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.

*RPDs have only been considered where a concentration is greater than 1 times the EQL.

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 200 (1 - 10 x EQL); 50 (10 - 30 x EQL); 30 (> 30 x EQL))

***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory



Location Code Sample Type Field ID Lab Report Number Date Matrix Type			0021_MW108	0021_MW108	RPD
			Normal	Interlab_D	
			0021_MW108_251023	0021_QC266_251023	
			ES2533521	1285374	
			23 Oct 2025	23 Oct 2025	
			Water	Water	
	Unit	EQL			
PFAS - Perfluoroalkyl Sulfonic Acids					
Perfluorobutane sulfonic acid (PFBS)	µg/L	0.01	0.15	0.14	7
Perfluorodecanesulfonic acid (PFDS)	µg/L	0.01	<0.02	<0.01	0
Perfluorononane sulfonate (PFNS)	µg/L	0.01	-	0.02	-
Perfluoroheptane sulfonic acid (PFHpS)	µg/L	0.01	0.12	0.12 ^{#1}	0
Perfluorooctane sulfonic acid (PFOS)	µg/L	0.01	3.80	4.7 ^{#1}	21
Perfluoropropanesulfonic acid (PFPrS)	µg/L	0.01	-	0.03	-
Perfluoropentane sulfonic acid (PFPeS)	µg/L	0.01	0.22	0.17 ^{#1}	26
Perfluorohexane sulfonic acid (PFHxS)	µg/L	0.01	2.91	2.9 ^{#1}	0
PFAS - Perfluoroalkyl Carboxylic Acids					
Perfluorobutanoic acid (PFBA)	µg/L	0.05	<0.1	<0.05	0
Perfluorodecanoic acid (PFDA)	µg/L	0.01	<0.02	<0.01	0
Perfluorododecanoic acid (PFDoDA)	µg/L	0.01	<0.02	<0.01	0
Perfluoroheptanoic acid (PFHpA)	µg/L	0.01	0.06	0.07 ^{#1}	15
Perfluorohexanoic acid (PFHxA)	µg/L	0.01	0.43	0.40	7
Perfluorononanoic acid (PFNA)	µg/L	0.01	<0.02	<0.01	0
Perfluorooctanoic acid (PFOA)	µg/L	0.01	0.12	0.12 ^{#1}	0
Perfluoropentanoic acid (PFPeA)	µg/L	0.01	0.08	0.09	12
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.01	<0.05	<0.01	0
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.01	<0.02	<0.01	0
Perfluoroundecanoic acid (PFUnDA)	µg/L	0.01	<0.02	<0.01	0
PFAS - Perfluoroalkyl Sulfonamide					
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	µg/L	0.05	<0.05	<0.05	0
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	µg/L	0.02	<0.02	<0.05	0
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	µg/L	0.05	<0.05	<0.05	0
N-Methyl perfluorooctane sulfonamide (MeFOSA)	µg/L	0.05	<0.05	<0.05	0
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	µg/L	0.02	<0.02	<0.05	0
N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	µg/L	0.05	<0.05	<0.05	0
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.02	<0.02	<0.05	0
PFAS - Fluorotelomer Sulfonic Acids					
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	µg/L	0.01	<0.05	<0.01	0
6:2 Fluorotelomer Sulfonate (6:2 FTS)	µg/L	0.05	<0.05	<0.05	0
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	µg/L	0.01	<0.05	<0.01	0
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	µg/L	0.01	<0.05	<0.01	0

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.

*RPDs have only been considered where a concentration is greater than 1 times the EQL.

**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 200 (1 - 10 x EQL); 50 (10 - 30 x EQL); 30 (> 30 x EQL))

***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory



Location Code Sample Type Field ID Lab Report Number Date Matrix Type			0020_SD024		RPD	0020_SD024		RPD	0021_SD018		RPD	0021_SD018		RPD
			Normal			Normal			Normal			Normal		
			Field_D			Field_D			Field_D			Field_D		
			0020_SD024_251020			0020_QC101_251020			0021_SD018_251022			0021_QC126_251022		
			ES2533546			ES2533546			ES2533521			ES2533538		
			20 Oct 2025			20 Oct 2025			22 Oct 2025			22 Oct 2025		
			Sediment			Sediment			Sediment			Sediment		
	Unit	EQL												
PFAS - Perfluoroalkyl Sulfonic Acids														
Perfluorobutane sulfonic acid (PFBS)	mg/kg	0.0002	<0.0002	<0.0002	0	<0.0002	<0.005	0	0.0007	<0.0002	111	0.0007	<0.005	0
Perfluorodecanesulfonic acid (PFDS)	mg/kg	0.0002	0.0011	0.0015	31	0.0011	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0
Perfluorononane sulfonate (PFNS)	mg/kg	0.005	-	-	-	-	<0.005	-	-	-	-	-	<0.005	-
Perfluoroheptane sulfonic acid (PFHpS)	mg/kg	0.0002	0.0003	0.0003	0	0.0003	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0
Perfluorooctane sulfonic acid (PFOS)	mg/kg	0.0002	0.0743	0.113	41	0.0743	0.039	62	0.0382	0.0375	2	0.0382	0.012 ^{#2}	104
Perfluoropropanesulfonic acid (PFPrS)	mg/kg	0.005	-	-	-	-	<0.005	-	-	-	-	-	<0.005	-
Perfluoropentane sulfonic acid (PFPeS)	mg/kg	0.0002	<0.0002	<0.0002	0	<0.0002	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0
Perfluorohexane sulfonic acid (PFHxS)	mg/kg	0.0002	0.0032	0.0030	6	0.0032	<0.005	0	0.0051	0.0060	16	0.0051	<0.005	2
PFAS - Perfluoroalkyl Carboxylic Acids														
Perfluorobutanoic acid (PFBA)	mg/kg	0.001	0.0004	0.0005	22	0.0004	<0.005	0	<0.001	<0.001	0	<0.001	<0.005	0
Perfluorodecanoic acid (PFDA)	mg/kg	0.0002	<0.001	<0.001	0	<0.001	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0
Perfluorododecanoic acid (PFDoDA)	mg/kg	0.0002	0.0004	0.0006	40	0.0004	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0002	<0.0002	<0.0002	0	<0.0002	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0002	<0.0002	<0.0002	0	<0.0002	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0
Perfluorononanoic acid (PFNA)	mg/kg	0.0002	0.0003	0.0004	29	0.0003	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0
Perfluorooctanoic acid (PFOA)	mg/kg	0.0002	<0.0002	<0.0002	0	<0.0002	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0002	<0.0002	<0.0002	0	<0.0002	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0005	<0.0005	<0.0006 ^{#1}	0	<0.0005	<0.005	0	<0.0006 ^{#1}	<0.0006 ^{#1}	0	<0.0006 ^{#1}	<0.005	0
Perfluorotridecanoic acid (PFTriDA)	mg/kg	0.0002	<0.0002	<0.0002	0	<0.0002	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0
Perfluoroundecanoic acid (PFUnDA)	mg/kg	0.0002	0.0005	0.0011	75	0.0005	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0
PFAS - Perfluoroalkyl Sulfonamide														
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	mg/kg	0.0005	<0.0005	<0.0006 ^{#1}	0	<0.0005	<0.005	0	<0.0006 ^{#1}	<0.0006 ^{#1}	0	<0.0006 ^{#1}	<0.005	0
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	mg/kg	0.0002	<0.0002	<0.0002	0	<0.0002	<0.01	0	<0.0002	<0.0002	0	<0.0002	<0.01	0
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	mg/kg	0.0005	<0.0005	<0.0006 ^{#1}	0	<0.0005	<0.005	0	<0.0006 ^{#1}	<0.0006 ^{#1}	0	<0.0006 ^{#1}	<0.005	0
N-Methyl perfluorooctane sulfonamide (MeFOSA)	mg/kg	0.0005	<0.0005	<0.0006 ^{#1}	0	<0.0005	<0.005	0	<0.0006 ^{#1}	<0.0006 ^{#1}	0	<0.0006 ^{#1}	<0.005	0
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	mg/kg	0.0002	<0.0002	<0.0002	0	<0.0002	<0.01	0	<0.0002	<0.0002	0	<0.0002	<0.01	0
N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	mg/kg	0.0005	<0.0005	<0.0006 ^{#1}	0	<0.0005	0.0052	165	<0.0006 ^{#1}	<0.0006 ^{#1}	0	<0.0006 ^{#1}	<0.005	0
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.0002	<0.0002	<0.0002	0	<0.0002	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0
PFAS - Fluorotelomer Sulfonic Acids														
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	mg/kg	0.0005	<0.0005	<0.0005	0	<0.0005	<0.005	0	<0.0005	<0.0005	0	<0.0005	<0.005	0
6:2 Fluorotelomer Sulfonate (6:2 FTS)	mg/kg	0.0005	<0.0005	<0.0005	0	<0.0005	<0.01	0	<0.0005	<0.0005	0	<0.0005	<0.01	0
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	mg/kg	0.0005	<0.0005	<0.0005	0	<0.0005	<0.005	0	<0.0005	<0.0005	0	<0.0005	<0.005	0
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	mg/kg	0.0005	<0.0005	<0.0005	0	<0.0005	<0.005	0	<0.0005	<0.0005	0	<0.0005	<0.005	0

Comments
#1 Reported Analyte LOR is higher than Requested Analyte LOR
#2 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.

*RPDs have only been considered where a concentration is greater than 1 times the EQL.
**Elevated RPDs are highlighted as per QAQC Profile settings (Acceptable RPDs for each EQL multiplier range are: 200 (1 - 10 x EQL); 50 (10 - 30 x EQL); 30 (> 30 x EQL))
***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory



Sample Type			Trip_B
Field ID			0021_QC502_251024
Lab Report Number			ES2533538
Date			24 Oct 2025
Matrix Type			Soil
	Unit	EQL	
PFAS - Perfluoroalkyl Sulfonic Acids			
Perfluorobutane sulfonic acid (PFBS)	mg/kg	0.0002	<0.0002
Perfluorodecanesulfonic acid (PFDS)	mg/kg	0.0002	<0.0002
Perfluoroheptane sulfonic acid (PFHpS)	mg/kg	0.0002	<0.0002
Perfluorooctane sulfonic acid (PFOS)	mg/kg	0.0002	<0.0002
Perfluoropentane sulfonic acid (PFPeS)	mg/kg	0.0002	<0.0002
Perfluorohexane sulfonic acid (PFHxS)	mg/kg	0.0002	<0.0002
PFAS - Perfluoroalkyl Carboxylic Acids			
Perfluorobutanoic acid (PFBA)	mg/kg	0.001	<0.001
Perfluorodecanoic acid (PFDA)	mg/kg	0.0002	<0.0002
Perfluorododecanoic acid (PFDoDA)	mg/kg	0.0002	<0.0002
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0002	<0.0002
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0002	<0.0002
Perfluorononanoic acid (PFNA)	mg/kg	0.0002	<0.0002
Perfluorooctanoic acid (PFOA)	mg/kg	0.0002	<0.0002
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0002	<0.0002
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0005	<0.0005
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0002	<0.0002
Perfluoroundecanoic acid (PFUnDA)	mg/kg	0.0002	<0.0002
PFAS - Perfluoroalkyl Sulfonamide			
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	mg/kg	0.0005	<0.0005
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	mg/kg	0.0002	<0.0002
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	mg/kg	0.0005	<0.0005
N-Methyl perfluorooctane sulfonamide (MeFOSA)	mg/kg	0.0005	<0.0005
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	mg/kg	0.0002	<0.0002
N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	mg/kg	0.0005	<0.0005
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.0002	<0.0002
PFAS - Fluorotelomer Sulfonic Acids			
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	mg/kg	0.0005	<0.0005
6:2 Fluorotelomer Sulfonate (6:2 FTS)	mg/kg	0.0005	<0.0005
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	mg/kg	0.0005	<0.0005
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	mg/kg	0.0005	<0.0005

Sample Type			Trip_B	Trip_B
Field ID			0020_QC501_251024	0021_QC503_251024
Lab Report Number			ES2533546	ES2533538
Date			24 Oct 2025	24 Oct 2025
Matrix Type			Water	Water
	Unit	EQL		
PFAS - Perfluoroalkyl Sulfonic Acids				
Perfluorobutane sulfonic acid (PFBS)	µg/L	0.02	<0.02	<0.02
Perfluorodecanesulfonic acid (PFDS)	µg/L	0.02	<0.02	<0.02
Perfluorononane sulfonate (PFNS)	µg/L	0.02	<0.02	-
Perfluoroheptane sulfonic acid (PFHpS)	µg/L	0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	µg/L	0.01	<0.01	<0.01
Perfluoropropanesulfonic acid (PFPrS)	µg/L	0.02	<0.02	-
Perfluoropentane sulfonic acid (PFPeS)	µg/L	0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	µg/L	0.01	<0.01	<0.01
PFAS - Perfluoroalkyl Carboxylic Acids				
Perfluorobutanoic acid (PFBA)	µg/L	0.1	<0.10	<0.1
Perfluorodecanoic acid (PFDA)	µg/L	0.02	<0.02	<0.02
Perfluorododecanoic acid (PFDoDA)	µg/L	0.02	<0.02	<0.02
Perfluoroheptanoic acid (PFHpA)	µg/L	0.02	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	µg/L	0.02	<0.02	<0.02
Perfluorononanoic acid (PFNA)	µg/L	0.02	<0.02	<0.02
Perfluorooctanoic acid (PFOA)	µg/L	0.01	<0.01	<0.01
Perfluoropentanoic acid (PFPeA)	µg/L	0.02	<0.02	<0.02
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.05	<0.05	<0.05
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.02	<0.02	<0.02
Perfluoroundecanoic acid (PFUnDA)	µg/L	0.02	<0.02	<0.02
PFAS - Perfluoroalkyl Sulfonamide				
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	µg/L	0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	µg/L	0.02	<0.02	<0.02
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	µg/L	0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamide (MeFOSA)	µg/L	0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	µg/L	0.02	<0.02	<0.02
N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	µg/L	0.05	<0.05	<0.05
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.02	<0.02	<0.02
PFAS - Fluorotelomer Sulfonic Acids				
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	µg/L	0.05	<0.05	<0.05
6:2 Fluorotelomer Sulfonate (6:2 FTS)	µg/L	0.05	<0.05	<0.05
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	µg/L	0.05	<0.05	<0.05
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	µg/L	0.05	<0.05	<0.05



Appendix C
Table C6
Rinsate Blank Analytical Results

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

Sample Type			Rinsate	Rinsate	Rinsate	Rinsate	Rinsate	Rinsate	Rinsate
Field ID			0020_QC300_251020	0020_QC320_251020	0020_QC340_251020	0020_QC360_251020	0021_QC301_251021	0021_QC302_251022	0021_QC304_251023
Lab Report Number			ES2533546	ES2533546	ES2533546	ES2533546	ES2533538	ES2533538	ES2533538
Date			20 Oct 2025	20 Oct 2025	20 Oct 2025	20 Oct 2025	21 Oct 2025	22 Oct 2025	23 Oct 2025
Matrix Type			Water	Water	Water	Water	Water	Water	Water
	Unit	EQL							
PFAS - Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorodecanesulfonic acid (PFDS)	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorononane sulfonate (PFNS)	µg/L	0.02	-	-	-	-	-	-	-
Perfluoroheptane sulfonic acid (PFHpS)	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluoropropanesulfonic acid (PFPrS)	µg/L	0.02	-	-	-	-	-	-	-
Perfluoropentane sulfonic acid (PFPeS)	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
PFAS - Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorodecanoic acid (PFDA)	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorododecanoic acid (PFDoDA)	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroheptanoic acid (PFHpA)	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorononanoic acid (PFNA)	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctanoic acid (PFOA)	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluoropentanoic acid (PFPeA)	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Perfluorotridecanoic acid (PFTTrDA)	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroundecanoic acid (PFUnDA)	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
PFAS - Perfluoroalkyl Sulfonamide									
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	µg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	µg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamide (MeFOSA)	µg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	µg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
PFAS - Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	µg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
6:2 Fluorotelomer Sulfonate (6:2 FTS)	µg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	µg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	µg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
PFAS - Sums									
PFAS (Sum of Total)	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
PFAS (Sum of Total)(WA DER List)	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sum of PFHxS and PFOS	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01



Appendix C
Table C6
Rinsate Blank Analytical Results

PFASIM
HMAS Creswell (0020), Jervis Bay Range Facility (JBRF) (0021)
12626622

Sample Type Field ID Lab Report Number Date Matrix Type			Rinsate	Rinsate	Rinsate	Rinsate	Rinsate	Rinsate	Rinsate	Rinsate
			0021_QC322_251022	0021_QC324_251023	0021_QC341_251021	0021_QC342_251022	0021_QC343_251023	0021_QC361_251021	0021_QC362_251022	0021_QC364_251023
			ES2533538	ES2533538	ES2533538	ES2533538	ES2533538	ES2533538	ES2533538	ES2533538
			22 Oct 2025	23 Oct 2025	21 Oct 2025	22 Oct 2025	23 Oct 2025	21 Oct 2025	22 Oct 2025	23 Oct 2025
	Unit	EQL	Water	Water	Water	Water	Water	Water	Water	Water
PFAS - Perfluoroalkyl Sulfonic Acids										
Perfluorobutane sulfonic acid (PFBS)	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorodecanesulfonic acid (PFDS)	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorononane sulfonate (PFNS)	µg/L	0.02	-	-	-	-	-	-	-	-
Perfluoroheptane sulfonic acid (PFHpS)	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluoropropanesulfonic acid (PFPrS)	µg/L	0.02	-	-	-	-	-	-	-	-
Perfluoropentane sulfonic acid (PFPeS)	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
PFAS - Perfluoroalkyl Carboxylic Acids										
Perfluorobutanoic acid (PFBA)	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluorodecanoic acid (PFDA)	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorododecanoic acid (PFDoDA)	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroheptanoic acid (PFHpA)	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorononanoic acid (PFNA)	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctanoic acid (PFOA)	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluoropentanoic acid (PFPeA)	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroundecanoic acid (PFUnDA)	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
PFAS - Perfluoroalkyl Sulfonamide										
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	µg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	µg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamide (MeFOSA)	µg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	µg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
PFAS - Fluorotelomer Sulfonic Acids										
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	µg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
6:2 Fluorotelomer Sulfonate (6:2 FTS)	µg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	µg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	µg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
PFAS - Sums										
PFAS (Sum of Total)	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
PFAS (Sum of Total)(WA DER List)	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sum of PFHxS and PFOS	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Appendix D

Field notes



Purging and Sampling Record

Well ID: 0020_MW001

Job Information		Sampling Information		Monitoring Well Information	
Client: Department of Defence		Purge Method: Low flow		SWL: 2.254 m bTOC Time SWL Measured: 06:51 AM	
Project: JBRF / HMAS Creswell OMP		Sample Method: Peri pump		Well Depth: 5.455 m bTOC Logic Check: Yes	
Proj. No.: 12626622 Base: 0020		Sample Depth: 4 m bTOC		NAPL Check: Absent Well Cap Secure? Yes	
Catchment: Flatrock Creek		WQuality Meter Type: YSI		NAPL Depth: m bTOC Gatic or Monument? Gatic	
Sampler: LR		Flow Cell Used? Yes		Screened Interval From: UN to 6.001 m bTOC	
Date: 23/10/2025		WLevel Meter Type: Interface Probe		Most recent SWL: 2.295 m bTOC (07 April 2025)	
Round: October 2025 OMP		Field Filtered? No		Historical ID (if applicable): CRMW1, CR MW1	

Time (hh:mm)	Volume (L)	Temp (°C)	pH (pH units)	Elec.Cond (µs/cm)	Dis.Oxygen (mg/L)	Ox-Red Pt. (± mV)	SWL (m bTOC)	Comment:
Stable when (3 consecutive readings):		+/- 0.2 °C	+/- 0.05 pH	+/- 3%	+/- 10%	+/- 10 mV	stable	Colour, turbidity, sediment load, sheen, odour, flow rate, purged dry?
07:02	0.50	19.4	5.91	298.4	0.79	53.8	2.350	Grey-brown, coudy, no odour or sheen, moderate to high turbidity
07:05	1.00	19.4	5.77	273.8	0.80	27.2	3.372	
07:07	1.50	19.6	5.70	259.3	0.92	-0.4	3.385	
07:10	2.00	19.6	5.69	258.2	0.87	-3.1	3.385	
07:13	2.50	19.6	5.64	252.9	0.97	-19.2	3.385	
07:16	3.00	19.5	5.63	248.3	0.94	-34.1	3.385	
07:19	3.50	19.6	5.62	250.5	0.90	-35.3	3.384	
07:21	4.00	19.5	5.58	247.2	0.91	-37.9	3.840	Grey-brown, coudy, no odour or sheen, moderate to high turbidity.
								Parameters stable, samples collected.
								Well cap replaced. New cap trimmed down to fit beneath gatic.
								The threaded end of the PVC standpipe (larger diameter) was installed facing up making it difficult to create a seal with the well cap Appears hasn't been
								sealed and there is potential for water ingress to have occurred

Field QA Checks:		Purge Volumes	
Air bubbles in vials or violent reactions?	No	Casing Int. Dia (mm) 50 100 150	
Decontamination as per GHD procedure?	Yes	Vol (L/m of casing) 2.0 7.9 17.7	
Was sampling equipment pre-cleaned?	Yes		
COC updated?	Yes		

Comment:			
Sample Summary			
Samples collected?	Yes	If duplicate collected, put	Duplicate 1 ID:
Lab QC collected?	No	ID (e.g. QC101, QC201):	Duplicate 2 ID:



Purging and Sampling Record

Well ID: 0020_MW017

Job Information		Sampling Information		Monitoring Well Information	
Client: Department of Defence		Purge Method:	Low flow	SWL:	1.450 m bTOC
Project: JBRF / HMAS Creswell OMP		Sample Method:	Peri pump	Well Depth:	4.905 m bTOC
Proj. No.: 12626622	Base: 0020	Sample Depth:	4.5 m bTOC	NAPL Check:	Absent
Catchment: Flatrock Creek		WQuality Meter Type:	YSI	NAPL Depth:	m bTOC
Sampler: AK		Flow Cell Used?	Yes	Gatic or Monument?	Monument
Date: 20/10/2025		WLevel Meter Type:	Interface Probe	Screened Interval From:	2.931 to 5.931 m bTOC
Round: October 2025 OMP		Field Filtered?	No	Most recent SWL:	0.909 m bTOC (31 March 2025)
				Historical ID (if applicable):	MW017

Time (hh:mm)	Volume (L)	Temp (°C)	pH (pH units)	Elec.Cond (µs/cm)	Dis.Oxygen (mg/L)	Ox-Red Pt. (± mV)	SWL (m bTOC)	Comment:
Stable when (3 consecutive readings):		+/- 0.2 °C	+/- 0.05 pH	+/- 3%	+/- 10%	+/- 10 mV	stable	Colour, turbidity, sediment load, sheen, odour, flow rate, purged dry?
13:45	0.50	23.6	5.06	1007.0	0.73	-262.5	1.500	Clear, yellow, moderate egg odour, no sheen or sediment
13:50	1.00	22.5	5.04	963.0	0.46	-281.9	1.520	
13:53	1.50	22.2	5.03	967.0	0.12	-293.1	1.520	Good recharge
13:56	2.00	22.1	5.03	945.0	0.07	-306.5	1.530	
13:59	2.50	22.0	5.03	943.0	0.06	-307.9	1.530	Clear, yellow, very weak egg odour, no sheen or sediment
14:02	3.00	21.8	5.03	934.0	0.06	-311.9	1.535	
14:05	3.50	21.6	5.05	907.0	0.04	-317.8	1.530	Recharge stable
14:08	4.00	21.7	5.04	917.0	0.03	-320.3	1.530	
14:11	4.50	21.6	5.03	872.0	0.02	-322.7	1.530	
14:14	5.00	21.6	5.03	872.0	0.02	-324.1	1.530	
14:17	5.50	21.5	5.03	867.0	0.02	-324.0	1.530	Clear, yellow, very weak egg odour, no sheen or sediment. Good recharge.
								Parameters and recharge stable, samples taken

Field QA Checks:		Purge Volumes	
Air bubbles in vials or violent reactions?	No		
Decontamination as per GHD procedure?	Yes	Casing Int. Dia (mm) 50 100 150	
Was sampling equipment pre-cleaned?	Yes	Vol (L/m of casing) 2.0 7.9 17.7	
COC updated?	Yes		

Comment: Base soft, silted up 1m	
Sample Summary	
Samples collected? Yes	Duplicate 1 ID:
Lab QC collected? Yes	Duplicate 2 ID:



Purging and Sampling Record

Well ID: 0020_MW055

Job Information		Sampling Information		Monitoring Well Information	
Client: Department of Defence		Purge Method: Low flow		SWL: 2.325 m bTOC Time SWL Measured: 03:15 PM	
Project: JBRF / HMAS Creswell OMP		Sample Method: Peri pump		Well Depth: 3.060 m bTOC Logic Check: Yes	
Proj. No.: 12626622 Base: 0020		Sample Depth: 3 m bTOC		NAPL Check: Absent Well Cap Secure? Yes	
Catchment: Captains Lagoon		WQuality Meter Type: YSI		NAPL Depth: m bTOC Gatic or Monument? Gatic	
Sampler: ES		Flow Cell Used? Yes		Screened Interval From: 1.539 to 3.539 m bTOC	
Date: 20/10/2025		WLevel Meter Type: Interface Probe		Most recent SWL: DRY m bTOC (07 April 2025)	
Round: October 2025 OMP		Field Filtered? No		Historical ID (if applicable): NA	

Time (hh:mm)	Volume (L)	Temp (°C)	pH (pH units)	Elec.Cond (µs/cm)	Dis.Oxygen (mg/L)	Ox-Red Pt. (± mV)	SWL (m bTOC)	Comment: Colour, turbidity, sediment load, sheen, odour, flow rate, purged dry?
Stable when (3 consecutive readings):		+/- 0.2 °C	+/- 0.05 pH	+/- 3%	+/- 10%	+/- 10 mV	stable	
15:25	0.50	20.4	5.48	243.5	1.00	-106.9	2.340	Brown, moderately turbid, slight organic odour, no sheen. Good recharge.
15:28	1.00	19.2	5.30	233.9	0.50	-82.0	2.340	
15:32	1.50	19.0	5.28	233.7	0.27	-110.8	2.340	Brown, moderately turbid, slight organic odour, no sheen. Good recharge.
15:35	2.00	18.9	5.30	233.8	0.14	-129.7	2.340	Pale yellow, clear, slight organic odour, no sheen. Good recharge.
15:38	2.50	18.7	5.30	232.5	0.16	-136.0	2.340	Pale yellow, clear, moderate hydrogen sulfide odour, no sheen. Good recharge.
15:41	3.00	18.9	5.31	233.7	0.15	-141.7	2.340	
15:44	3.50	18.8	5.39	233.8	0.17	-150.9	2.340	
15:47	4.00	18.7	5.39	233.5	0.17	-153.1	2.310	Pale yellow, clear, moderate hydrogen sulfide odour, no sheen. Good recharge.
15:50	4.50	18.8	5.41	233.7	0.18	-156.5	2.340	
15:53	5.00	18.9	5.42	234.0	0.18	-158.0	2.340	Pale yellow, clear, moderate hydrogen sulfide odour, no sheen. Good recharge.
								Parameters stable, samples collected.

Field QA Checks:		Purge Volumes	
Air bubbles in vials or violent reactions?	No	Casing Int. Dia (mm) 50 100 150 Vol (L/m of casing) 2.0 7.9 17.7	
Decontamination as per GHD procedure?	Yes		
Was sampling equipment pre-cleaned?	Yes		
COC updated?	Yes		

Comment: Gatic buried under 50mm of mulch covering.			
Sample Summary			
Samples collected?	Yes	If duplicate collected, put	Duplicate 1 ID: 0020_QC122_251020
Lab QC collected?	No	ID (e.g. QC101, QC201):	Duplicate 2 ID: 0020_QC222_251020



Purging and Sampling Record

Well ID: 0020_MW057

Job Information	Sampling Information	Monitoring Well Information
Client: Department of Defence	Purge Method: Low flow	SWL: 1.722 m bTOC Time SWL Measured: 09:30 AM
Project: JBRF / HMAS Creswell OMP	Sample Method: Peri pump	Well Depth: 4.542 m bTOC Logic Check: Yes
Proj. No.: 12626622 Base: 0020	Sample Depth: 3.5 m bTOC	NAPL Check: Absent Well Cap Secure? Yes
Catchment: Captains Lagoon	WQuality Meter Type: YSI	NAPL Depth: m bTOC Gatic or Monument? Monument
Sampler: AD	Flow Cell Used? Yes	Screened Interval From: 1.743 to 4.743 m bTOC
Date: 20/10/2025	WLevel Meter Type: Interface Probe	Most recent SWL: 3.07 m bTOC (31 March 2025)
Round: October 2025 OMP	Field Filtered? No	Historical ID (if applicable): NA

Time (hh:mm)	Volume (L)	Temp (°C)	pH (pH units)	Elec.Cond (µs/cm)	Dis.Oxygen (mg/L)	Ox-Red Pt. (± mV)	SWL (m bTOC)	Comment:
Stable when (3 consecutive readings):		+/- 0.2 °C	+/- 0.05 pH	+/- 3%	+/- 10%	+/- 10 mV	stable	Colour, turbidity, sediment load, sheen, odour, flow rate, purged dry?
09:41	0.50	16.6	5.93	265.3	0.19	104.9	1.780	Clear, no odour, no sheen, trace suspended organic matter
09:45	1.00	16.6	5.96	266.0	0.17	107.2	1.778	Good recharge, pump speed increased
09:47	1.50	16.6	5.97	265.5	0.13	108.9	1.781	
09:50	2.00	16.6	5.93	262.8	0.20	110.3	1.783	
09:53	2.50	16.6	5.93	260.8	0.29	111.7	1.785	
09:55	3.00	16.5	5.94	260.3	0.29	108.2	1.786	
09:58	3.50	16.6	5.96	261.7	0.24	95.8	1.786	Clear, no odour, no sheen, no trace suspended organic matter
10:00	4.00	16.5	5.99	263.1	0.20	80.4	1.787	
10:02	4.50	16.5	6.00	263.4	0.15	56.9	1.786	
10:04	5.00	16.5	6.01	264.2	0.13	32.7	1.786	
10:07	5.50	16.5	6.02	264.6	0.11	5.0	1.788	
10:10	6.00	16.4	6.02	265.1	0.10	-10.7	1.785	
10:13	6.50	16.5	6.01	264.7	0.10	-21.6	1.788	
10:15	7.00	16.5	6.01	264.3	0.10	-24.7	1.789	
10:18	7.50	16.5	6.01	264.2	0.11	-27.4	1.790	Clear, no odour, no sheen, no sediment. Good recharge.
								Parameters stable, samples collected

Field QA Checks:		Purge Volumes
Air bubbles in vials or violent reactions?	No	Casing Int. Dia (mm) 50 100 150
Decontamination as per GHD procedure?	Yes	Vol (L/m of casing) 2.0 7.9 17.7
Was sampling equipment pre-cleaned?	Yes	
COC updated?	Yes	

Comment:	Roots and organic matter retrieved on end of dip meter		
Sample Summary	Samples collected? Yes	If duplicate collected, put	Duplicate 1 ID:
	Lab QC collected? No	ID (e.g. QC101, QC201):	Duplicate 2 ID:

Purging and Sampling Record

Well ID: 0020 MW059

Job Information		Sampling Information		Monitoring Well Information					
Client:	Department of Defence	Purge Method:	Low flow	SWL:	2.401 m bTOC	Time SWL Measured:	09:15 AM		
Project:	JBRF / HMAS Creswell OMP	Sample Method:	Peri pump	Well Depth:	3.785 m bTOC	Logic Check:	Yes		
Proj. No.:	12626622	Base:	0020	Sample Depth:	3.5 m bTOC	NAPL Check:	Absent	Well Cap Secure?	Yes
Catchment:	Captains Lagoon	WQuality Meter Type:	YSI	NAPL Depth:	m bTOC	Gatic or Monument?	Monument		
Sampler:	LR	Flow Cell Used?	Yes	Screened Interval From:	1.978 to 3.978 m bTOC				
Date:	20/10/2025	WLevel Meter Type:	Interface Probe	Most recent SWL:	1.905 m bTOC (31 March 2025)				
Round:	October 2025 OMP	Field Filtered?	No	Historical ID (if applicable):	NA				

[illegible]

Field QA Checks: Air bubbles in vials or violent reactions? No Decontamination as per GHD procedure? Yes Was sampling equipment pre-cleaned? Yes COC updated? Yes		Purge Volumes Casing Int. Dia (mm) 50 100 150 Vol (L/m of casing) 2.0 7.9 17.7			

Comment: Extra sample for lab QC.				
Sample Summary	Samples collected?	Yes	If duplicate collected, put	Duplicate 1 ID:
	Lab QC collected?	Yes	ID (e.g. QC101, QC201):	Duplicate 2 ID:



Purging and Sampling Record

Well ID: 0020_MW068

Job Information		Sampling Information		Monitoring Well Information	
Client: Department of Defence		Purge Method:	Low flow	SWL:	8.350 m bTOC
Project: JBRF / HMAS Creswell OMP		Sample Method:	Peri pump	Well Depth:	4.105 m bTOC
Proj. No.: 12626622	Base: 0020	Sample Depth:	7 m bTOC	NAPL Check:	Absent
Catchment: Flatrock Creek		WQuality Meter Type:	YSI	NAPL Depth:	m bTOC
Sampler: ES / AK		Flow Cell Used?	Yes	Screened Interval From:	5.24 to 8.24 m bTOC
Date: 20/10/2025		WLevel Meter Type:	Interface Probe	Most recent SWL: 6.217 m bTOC (01 April 2025)	
Round: October 2025 OMP		Field Filtered?	No	Historical ID (if applicable): NA	

Time (hh:mm)	Volume (L)	Temp (°C)	pH (pH units)	Elec.Cond (µs/cm)	Dis.Oxygen (mg/L)	Ox-Red Pt. (± mV)	SWL (m bTOC)	Comment:
Stable when (3 consecutive readings):		+/- 0.2 °C	+/- 0.05 pH	+/- 3%	+/- 10%	+/- 10 mV	stable	Colour, turbidity, sediment load, sheen, odour, flow rate, purged dry?
11:35	0.50	18.9	5.76	426.5	2.92	82.9	4.400	Clear, no odour, sheen or sediment
11:39	1.00	19.0	5.56	294.8	2.97	104.4	4.550	
11:43	1.50	18.9	5.45	226.6	3.39	115.7	4.655	Clear, no odour, sheen or sediment
11:47	2.00	18.9	5.35	225.1	3.33	224.8	4.770	
11:51	2.50	18.9	5.34	225.3	3.52	125.2	4.815	Clear, no odour, sheen or sediment
11:55	3.00	18.9	5.31	225.9	3.55	127.0	4.885	
11:59	3.50	18.9	5.31	225.8	5.31	127.3	4.920	Clear, no odour, sheen or sediment
12:03	4.00	18.9	5.27	226.4	5.27	89.8	4.995	
12:07	4.50	18.9	5.26	226.3	5.25	97.5	5.030	Clear, no odour, sheen or sediment
12:11	5.00	18.9	5.22	226.1	5.22	111.2	5.080	
12:15	5.50	18.8	5.18	226.5	5.18	119.2	5.150	
12:19	6.00	18.9	5.17	226.0	5.17	124.2	5.195	Clear, no odour, sheen or sediment, slowed pump
12:23	6.50	18.9	5.27	226.1	3.06	119.0	5.195	Stable SWL.
12:27	7.00	18.9	5.27	227.0	2.98	121.9	5.195	
12:31	7.50	18.9	5.23	226.6	2.86	125.2	5.195	Clear, no odour, sheen or sediment. Good recharge.
								Parameters and recharge stable, samples collected

Field QA Checks:		Purge Volumes	
Air bubbles in vials or violent reactions?	No	Casing Int. Dia (mm) 50 100 150	
Decontamination as per GHD procedure?	Yes	Vol (L/m of casing) 2.0 7.9 17.7	
Was sampling equipment pre-cleaned?	Yes		
COC updated?	Yes		

Comment: Screen and SWL information suggests screen is flooded	
Sample Summary	Samples collected? Yes If duplicate collected, put Duplicate 1 ID: Lab QC collected? No ID (e.g. QC101, QC201): Duplicate 2 ID:



Purging and Sampling Record

Well ID: 0020_MW070

Job Information		Sampling Information		Monitoring Well Information	
Client: Department of Defence		Purge Method: Low flow		SWL: 1.310 m bTOC Time SWL Measured: 12:50 PM	
Project: JBRF / HMAS Creswell OMP		Sample Method: Peri pump		Well Depth: 2.255 m bTOC Logic Check: Yes	
Proj. No.: 12626622 Base: 0020		Sample Depth: 2 m bTOC		NAPL Check: Absent Well Cap Secure? Yes	
Catchment: Captains Lagoon		WQuality Meter Type: YSI		NAPL Depth: m bTOC Gatic or Monument? Gatic	
Sampler: ES		Flow Cell Used? Yes		Screened Interval From: 0.9 to 2.4 m bgl (no survey yet)	
Date: 20/10/2025		WLevel Meter Type: Interface Probe		Most recent SWL: 1.13 m bTOC (24 April 2025)	
Round: October 2025 OMP		Field Filtered? No		Historical ID (if applicable): NA	

Time (hh:mm)	Volume (L)	Temp (°C)	pH (pH units)	Elec.Cond (µs/cm)	Dis.Oxygen (mg/L)	Ox-Red Pt. (± mV)	SWL (m bTOC)	Comment:
Stable when (3 consecutive readings):		+/- 0.2 °C	+/- 0.05 pH	+/- 3%	+/- 10%	+/- 10 mV	stable	Colour, turbidity, sediment load, sheen, odour, flow rate, purged dry?
12:54	0.50	18.9	5.21	157.2	1.25	-110.4	1.320	
12:57	1.00	18.6	5.05	144.8	1.08	-124.2	1.320	Slight pale brown, moderately turbid, slight hydrogen sulfide odour or sheen.
13:00	1.50	18.9	4.93	137.8	0.97	-125.7	1.320	Good recharge.
13:03	2.00	18.7	4.86	128.5	0.63	-121.6	1.320	Slight pale brown, moderately turbid, slight hydrogen sulfide odour or sheen.
13:06	2.50	18.8	4.88	124.3	0.34	-126.7	1.320	Good recharge.
13:09	3.00	18.7	4.86	118.8	0.33	-130.5	1.320	
13:12	3.50	18.7	4.95	103.0	0.25	-137.2	1.320	
13:15	4.00	18.8	4.99	103.5	0.27	-140.6	1.320	Pale yellow, clear, slight hydrogen sulfide odour, no sheen. Good recharge.
13:18	4.50	18.8	4.95	104.2	0.18	-145.3	1.320	
13:21	5.00	18.8	4.95	102.3	0.18	-149.9	1.320	Pale yellow, clear, slight hydrogen sulfide odour, no sheen. Good recharge.
13:24	5.50	18.8	4.95	102.6	0.18	-135.3	1.320	
13:27	6.00	18.8	4.94	103.0	0.17	-135.8	1.320	
13:30	6.50	18.8	4.93	101.5	0.17	-128.5	1.320	Pale yellow, clear, slight hydrogen sulfide odour, no sheen. Good recharge.
								Parameters stable, samples collected.

Field QA Checks:		Purge Volumes	
Air bubbles in vials or violent reactions?	No	Casing Int. Dia (mm) 50 100 150	
Decontamination as per GHD procedure?	Yes	Vol (L/m of casing) 2.0 7.9 17.7	
Was sampling equipment pre-cleaned?	Yes		
COC updated?	Yes		

Comment:			
Sample Summary			
Samples collected?	Yes	If duplicate collected, put	Duplicate 1 ID: 0020_QC121_251020
Lab QC collected?	No	ID (e.g. QC101, QC201):	Duplicate 2 ID: 0020_QC221_251020



Purging and Sampling Record

Well ID: 0020_MW110

Job Information	Sampling Information	Monitoring Well Information
Client: Department of Defence	Purge Method: Low flow	SWL: 1.165 m bTOC Time SWL Measured: 03:32 PM
Project: JBRF / HMAS Creswell OMP	Sample Method: Peri pump	Well Depth: 3.020 m bTOC Logic Check: Yes
Proj. No.: 12626622 Base: 0020	Sample Depth: 2.7 m bTOC	NAPL Check: Absent Well Cap Secure? Yes
Catchment: Flatrock Creek	WQuality Meter Type: YSI	NAPL Depth: m bTOC Gatic or Monument? Monument
Sampler: AK	Flow Cell Used? Yes	Screened Interval From: 1.885 to 2.885 m bTOC
Date: 20/10/2025	WLevel Meter Type: Interface Probe	Most recent SWL: 1.01 m bTOC (31 March 2025)
Round: October 2025 OMP	Field Filtered? No	Historical ID (if applicable): E MW05

Time (hh:mm)	Volume (L)	Temp (°C)	pH (pH units)	Elec.Cond (µs/cm)	Dis.Oxygen (mg/L)	Ox-Red Pt. (± mV)	SWL (m bTOC)	Comment:
Stable when (3 consecutive readings):		+/- 0.2 °C	+/- 0.05 pH	+/- 3%	+/- 10%	+/- 10 mV	stable	Colour, turbidity, sediment load, sheen, odour, flow rate, purged dry?
15:39	0.50	20.5	5.91	734.0	0.21	-234.2	1.290	Opaque, dark brown, heavy fine brown suspended sediment, very weak egg
15:44	1.00	20.5	5.86	737.0	0.21	-257.7	1.260	odour, no sheen
15:48	1.50	20.2	5.85	735.0	0.11	-273.2	1.280	
15:51	2.00	20.0	5.86	734.0	0.14	-27.1	1.300	
15:54	2.50	20.2	5.85	735.0	0.12	-277.7	1.270	Good recharge
15:59	3.00	20.2	5.85	732.0	0.09	-282.7	1.265	
16:03	3.50	20.0	5.84	709.0	0.08	-284.9	1.265	
16:06	4.00	19.9	5.85	706.0	0.09	-282.5	1.265	
16:10	4.50	19.9	5.85	707.0	0.09	-280.7	1.265	Cloudy, pale brown, trace suspended sediment, no odour or sheen
16:14	5.00	20.0	5.85	714.0	0.10	-279.3	1.265	Cloudy, pale brown, trace suspended sediment, no odour or sheen
								Parameters and recharge stable, samples taken

Field QA Checks:		Purge Volumes
Air bubbles in vials or violent reactions?	No	Casing Int. Dia (mm) 50 100 150
Decontamination as per GHD procedure?	Yes	Vol (L/m of casing) 2.0 7.9 17.7
Was sampling equipment pre-cleaned?	Yes	
COC updated?	Yes	

Comment:		
Sample Summary	Samples collected? Yes	Duplicate 1 ID:
	Lab QC collected? Yes	Duplicate 2 ID:
	If duplicate collected, put ID (e.g. QC101, QC201):	



Purging and Sampling Record

Well ID: 0021_MW022

Job Information		Sampling Information		Monitoring Well Information	
Client: Department of Defence		Purge Method:	Low flow	SWL:	2.210 m bTOC
Project: JBRF / HMAS Creswell OMP		Sample Method:	Peri pump	Well Depth:	7.435 m bTOC
Proj. No.: 12626622	Base: 0021	Sample Depth:	6 m bTOC	NAPL Check:	Absent
Catchment: Summercloud Creek		WQuality Meter Type:	YSI	NAPL Depth:	m bTOC
Sampler: LR		Flow Cell Used?	Yes	Screened Interval From:	4.657 to 7.657 m bTOC
Date: 23/10/2025		WLevel Meter Type:	Interface Probe	Most recent SWL: 2.02 m bTOC (01 April 2025)	
Round: October 2025 OMP		Field Filtered?	No	Historical ID (if applicable): NA	

Time (hh:mm)	Volume (L)	Temp (°C)	pH (pH units)	Elec.Cond (µs/cm)	Dis.Oxygen (mg/L)	Ox-Red Pt. (± mV)	SWL (m bTOC)	Comment:
Stable when (3 consecutive readings):		+/- 0.2 °C	+/- 0.05 pH	+/- 3%	+/- 10%	+/- 10 mV	stable	Colour, turbidity, sediment load, sheen, odour, flow rate, purged dry?
14:36	0.50	18.5	4.27	204.1	0.32	-86.3	2.480	Grey-brown tinge, decaying organic odour, no sheen, low-moderate turbidity.
14:39	1.00	18.2	4.06	209.6	0.07	-154.5	2.574	Becoming pale orange in colour, orange flocculation, no odours, low turbidity
14:42	1.50	18.2	4.08	209.2	0.07	-178.0	-	Orange flocculation reducing
14:45	2.00	18.2	4.09	209.2	0.02	-207.2	2.732	Pale orange, no odour or sheen, low turbidity.
14:48	2.50	18.0	4.08	207.0	0.00	-228.9	2.780	
14:51	3.00	18.1	4.10	208.6	0.00	-237.9	2.808	
14:54	3.50	18.1	4.10	208.4	0.00	-242.1	2.830	
14:57	4.00	18.1	4.14	209.8	0.00	-258.9	2.841	
15:00	4.50	18.2	4.10	208.9	0.00	-271.3	2.861	
15:03	5.00	18.1	4.07	208.4	0.00	-273.8	2.880	
15:06	5.50	18.1	4.07	208.8	0.00	-273.8	2.890	Pale orange, no odour or sheen, low turbidity. Good recharge.
								Parameters stable, samples collected.

Field QA Checks:		Purge Volumes	
Air bubbles in vials or violent reactions?	No		
Decontamination as per GHD procedure?	Yes	Casing Int. Dia (mm) 50 100 150	
Was sampling equipment pre-cleaned?	Yes	Vol (L/m of casing) 2.0 7.9 17.7	
COC updated?	Yes		

Comment:			
Sample Summary			
Samples collected?	Yes	If duplicate collected, put	Duplicate 1 ID:
Lab QC collected?	No	ID (e.g. QC101, QC201):	Duplicate 2 ID:



Purging and Sampling Record

Well ID: 0021_MW028

Job Information	Sampling Information	Monitoring Well Information
Client: Department of Defence	Purge Method: Low flow	SWL: 1.350 m bTOC Time SWL Measured: 10:18 AM
Project: JBRF / HMAS Creswell OMP	Sample Method: Peri pump	Well Depth: 6.870 m bTOC Logic Check: Yes
Proj. No.: 12626622 Base: 0021	Sample Depth: 6.5 m bTOC	NAPL Check: Absent Well Cap Secure? No
Catchment: Captains Lagoon	WQuality Meter Type: YSI	NAPL Depth: m bTOC Gatic or Monument? Monument
Sampler: ES	Flow Cell Used? Yes	Screened Interval From: 3.789 to 6.789 m bTOC
Date: 21/10/2025	WLevel Meter Type: Interface Probe	Most recent SWL: 1.07 m bTOC (02 April 2025)
Round: October 2025 OMP	Field Filtered? No	Historical ID (if applicable): 0021 MW08, MW8

Time (hh:mm)	Volume (L)	Temp (°C)	pH (pH units)	Elec.Cond (µs/cm)	Dis.Oxygen (mg/L)	Ox-Red Pt. (± mV)	SWL (m bTOC)	Comment:
Stable when (3 consecutive readings):		+/- 0.2 °C	+/- 0.05 pH	+/- 3%	+/- 10%	+/- 10 mV	stable	Colour, turbidity, sediment load, sheen, odour, flow rate, purged dry?
10:24	0.00						0.450	SWL is 0.45 from top of snapped section, initial SWL taken from
								original height holding PVC top section back on.
10:26	0.50	17.8	5.35	1679.0	1.45	130.4	0.670	Purging fast, screen is flooded. Poor recharge.
10:28	1.00	17.6	5.27	1669.0	0.41	124.4	0.930	Pale orange, slightly turbid, no sediment, no odour or sheen.
10:30	1.50	17.6	5.26	1669.0	0.22	121.6	1.150	Pale orange, slightly turbid, no sediment, no odour or sheen.
10:32	2.00	17.6	5.26	1665.0	0.17	120.7	1.250	SWL drop indicates well recharging now, reduced speed
10:35	2.50	17.8	5.32	1682.0	0.12	112.7	1.310	Pale yellow, clear, no odour or sheen.
10:38	3.00	17.9	5.44	1699.0	0.10	99.0	1.320	Reduced purge rate
10:41	3.40	18.0	5.49	1710.0	0.09	91.0	1.320	Colourless, clear, no odour or sheen.
10:44	3.80	18.1	5.57	1729.0	0.08	77.4	1.310	
10:47	4.20	18.1	5.66	1735.0	0.07	70.7	1.310	Slight pale yellow, clear, no odour or sheen. Good recharge.
10:50	4.60	18.0	5.72	1747.0	0.06	60.1	1.310	
10:53	5.00	18.0	5.71	1751.0	0.06	56.9	1.310	Slight pale yellow, clear, no odour or sheen. Good recharge.
10:56	5.40	18.0	5.68	1747.0	0.06	58.9	1.310	
10:59	5.80	18.0	5.71	1758.0	0.06	52.5	1.310	Slight pale yellow, clear, no odour or sheen. Good recharge.
								Parameters stable, samples collected.

Field QA Checks:		Purge Volumes
Air bubbles in vials or violent reactions?	No	Casing Int. Dia (mm) 50 100 150
Decontamination as per GHD procedure?	Yes	Vol (L/m of casing) 2.0 7.9 17.7
Was sampling equipment pre-cleaned?	Yes	
COC updated?	Yes	

Comment:	21/10/2025 - Monument has been backed into, PVC too section snapped off at joint, top section PVC and monument are not secure. Repairs needed		
Sample Summary	Samples collected? Yes	If duplicate collected, put	Duplicate 1 ID: 0021_QC123_251021
	Lab QC collected? No	ID (e.g. QC101, QC201): QC123, QC223	Duplicate 2 ID: 0021_QC223_251021



Purging and Sampling Record

Well ID: 0021_MW030

Job Information		Sampling Information		Monitoring Well Information	
Client: Department of Defence		Purge Method: Low flow		SWL: 1.445 m bTOC Time SWL Measured: 02:05 PM	
Project: JBRF / HMAS Creswell OMP		Sample Method: Peri pump		Well Depth: 10.660 m bTOC Logic Check: Yes	
Proj. No.: 12626622 Base: 0021		Sample Depth: 10.1 m bTOC		NAPL Check: Absent Well Cap Secure? Yes	
Catchment: Captains Lagoon		WQuality Meter Type: YSI		NAPL Depth: m bTOC Gatic or Monument? Monument	
Sampler: ES		Flow Cell Used? Yes		Screened Interval From: 7.615 to 10.615 m bTOC	
Date: 22/10/2025		WLevel Meter Type: Interface Probe		Most recent SWL: 0.972 m bTOC (03 April 2025)	
Round: October 2025 OMP		Field Filtered? No		Historical ID (if applicable): MW6	

Time (hh:mm)	Volume (L)	Temp (°C)	pH (pH units)	Elec.Cond (µs/cm)	Dis.Oxygen (mg/L)	Ox-Red Pt. (± mV)	SWL (m bTOC)	Comment:
Stable when (3 consecutive readings):		+/- 0.2 °C	+/- 0.05 pH	+/- 3%	+/- 10%	+/- 10 mV	stable	Colour, turbidity, sediment load, sheen, odour, flow rate, purged dry?
14:09	0.40	19.1	6.13	2062.0	0.58	-16.3	1.610	Brown, highly turbid, no odour or sheen. Pump speed on lowest
14:12	0.70	19.0	6.00	2060.0	0.27	-36.3	1.750	
14:15	1.00	19.0	6.01	2058.0	0.25	-43.0	1.880	Brown, highly turbid, no odour or sheen. Poor recharge.
14:18	1.30	19.0	6.06	2051.0	0.20	-49.4	1.990	
14:21	1.60	18.8	6.10	2047.0	0.16	-53.9	2.090	Brown, highly turbid, no odour or sheen. Poor recharge.
14:24	1.90	19.0	6.13	2050.0	0.13	-56.7	2.190	
14:27	2.20	19.0	6.15	2046.0	0.11	-59.3	2.290	Brown, highly turbid, no odour or sheen. Poor recharge.
14:30	2.50	19.0	6.16	2021.0	0.17	-51.4	2.350	
14:33	2.80	18.9	6.17	2020.0	0.24	-51.8	2.420	Brown, slightly turbid, no odour or sheen. Ok recharge.
14:36	3.10	18.3	6.15	1994.0	0.25	-46.3	2.480	
14:39	3.40	18.4	6.14	1998.0	0.27	-44.2	2.540	Brown, slightly turbid, no odour or sheen. Ok recharge.
14:42	3.70	18.3	6.19	1985.0	0.32	-43.5	2.590	
14:45	4.00	18.3	6.19	1995.0	0.34	-43.5	2.635	Pale yellow, slightly turbid, no odour or sheen. Ok recharge.
14:48	4.30	18.3	6.20	2000.0	0.32	-44.1	2.665	
14:51	4.60	18.3	6.22	2005.0	0.31	-45.1	2.700	Pale yellow, slightly turbid, no odour or sheen. Ok recharge.
								Parameters stable, samples collected

Field QA Checks:		Purge Volumes	
Air bubbles in vials or violent reactions?	No	Casing Int. Dia (mm) 50 100 150	
Decontamination as per GHD procedure?	Yes	Vol (L/m of casing) 2.0 7.9 17.7	
Was sampling equipment pre-cleaned?	Yes		
COC updated?	Yes		

Comment:			
Sample Summary			
Samples collected?	Yes	If duplicate collected, put	Duplicate 1 ID:
Lab QC collected?	No	ID (e.g. QC101, QC201):	Duplicate 2 ID:

Well ID: 0021 MW072

Job Information		Sampling Information		Monitoring Well Information				
Client: Department of Defence		Purge Method:	Low flow	SWL:	1.045	m bTOC	Time SWL Measured:	11:02 AM
Project: JBRF / HMAS Creswell OMP		Sample Method:	Peri pump	Well Depth:	3.515	m bTOC	Logic Check:	Yes
Proj. No.: 12626622	Base: 0021	Sample Depth:	1.5	m bTOC	NAPL Check:	Absent	Well Cap Secure?	Yes
Catchment: Mary Creek		WQuality Meter Type:	YSI	NAPL Depth:	m bTOC	Gatic or Monument?	Monument	
Sampler: AD		Flow Cell Used?	Yes	Screened Interval From: 1.22 to 2.12 m bTOC				
Date: 23/10/2025		WLevel Meter Type:	Interface Probe	Most recent SWL: 0.8 m bTOC (07 April 2025)				
Round: October 2025 OMP		Field Filtered?	No	Historical ID (if applicable): NA				

[illegible]

Field QA Checks: Air bubbles in vials or violent reactions? No Decontamination as per GHD procedure? Yes Was sampling equipment pre-cleaned? Yes COC updated? Yes		Purge Volumes Casing Int. Dia (mm) 50 100 150 Vol (L/m of casing) 2.0 7.9 17.7			

Comment: _____				
Sample Summary	Samples collected?	Yes	If duplicate collected, put	Duplicate 1 ID: _____
	Lab QC collected?	No	ID (e.g. QC101, QC201): _____	Duplicate 2 ID: _____

Well ID: 0021_MW101

Job Information		Sampling Information		Monitoring Well Information			
Client: Department of Defence		Purge Method:	Low flow	SWL:	1.025 m bTOC	Time SWL Measured:	11:10 AM
Project: JBRF / HMAS Creswell OMP		Sample Method:	Peri pump	Well Depth:	1.980 m bTOC	Logic Check:	Yes
Proj. No.: 12626622	Base: 0021	Sample Depth:	1.8 m bTOC	NAPL Check:	Absent	Well Cap Secure?	Yes
Catchment: Mary Creek		WQuality Meter Type:	YSI	NAPL Depth:	m bTOC	Gatic or Monument?	Gatic
Sampler: AK		Flow Cell Used?	Yes	Screened Interval From: 1.019 to 2.019 m bTOC			
Date: 23/10/2025		WLevel Meter Type:	Interface Probe	Most recent SWL: 0.575 m bTOC (04 April 2025)			
Round: October 2025 OMP		Field Filtered?	No	Historical ID (if applicable):		A MW01	

[illegible]

Field QA Checks:		Purge Volumes			
Air bubbles in vials or violent reactions?	No				
Decontamination as per GHD procedure?	Yes	Casing Int. Dia (mm)	50	100	150
Was sampling equipment pre-cleaned?	Yes	Vol (L/m of casing)	2.0	7.9	17.7
COC updated?	Yes				

Comment:				
Sample Summary	Samples collected?	Yes	If duplicate collected, put	Duplicate 1 ID:
	Lab QC collected?	No	ID (e.g. QC101, QC201):	Duplicate 2 ID:



Purging and Sampling Record

Well ID: 0021_MW110

Job Information		Sampling Information		Monitoring Well Information	
Client: Department of Defence		Purge Method:	Low flow	SWL:	1.590 m bTOC
Project: JBRF / HMAS Creswell OMP		Sample Method:	Peri pump	Well Depth:	2.680 m bTOC
Proj. No.: 12626622	Base: 0021	Sample Depth:	2.2 m bTOC	NAPL Check:	Absent
Catchment: Mary Creek		WQuality Meter Type:	YSI	NAPL Depth:	m bTOC
Sampler: ES		Flow Cell Used?	Yes	Screened Interval From:	1.746 to 2.746 m bTOC
Date: 23/10/2025		WLevel Meter Type:	Interface Probe	Most recent SWL: 1.117 m bTOC (01 April 2025)	
Round: October 2025 OMP		Field Filtered?	No	Historical ID (if applicable): B MW01	

Time (hh:mm)	Volume (L)	Temp (°C)	pH (pH units)	Elec.Cond (µs/cm)	Dis.Oxygen (mg/L)	Ox-Red Pt. (± mV)	SWL (m bTOC)	Comment: Colour, turbidity, sediment load, sheen, odour, flow rate, purged dry?
Stable when (3 consecutive readings):		+/- 0.2 °C	+/- 0.05 pH	+/- 3%	+/- 10%	+/- 10 mV	stable	
14:10	0.40	18.6	4.94	228.1	0.93	-159.1	1.690	Dark brown, highly turbid, organic odour, no sheen. Good recharge.
14:13	0.80	18.7	4.98	221.0	0.22	-175.0	1.700	
14:16	1.20	18.5	4.96	214.8	0.17	-175.8	1.720	
14:19	1.60	18.2	4.97	208.4	0.14	-170.1	1.740	Dark brown, moderately turbid, organic odour, no sheen. Good recharge.
14:22	2.00	18.1	5.02	203.6	0.12	-168.0	1.740	Reduced purge rate.
14:25	2.40	18.0	5.01	200.1	0.11	-167.0	1.740	
14:28	2.80	18.0	5.01	199.0	0.09	-165.0	1.740	Brown, slightly turbid, slight organic odour, no sheen. Good recharge.
14:31	3.20	18.0	5.04	197.7	0.08	-169.8	1.740	
14:34	3.60	18.0	5.05	197.2	0.08	-169.2	1.740	
14:37	4.00	18.1	5.08	197.2	0.08	-168.5	1.740	Brown, slightly turbid, slight organic odour, no sheen. Good recharge.
								Parameters stable, samples collected.

Field QA Checks:		Purge Volumes	
Air bubbles in vials or violent reactions?	No	Casing Int. Dia (mm) 50 100 150	
Decontamination as per GHD procedure?	Yes	Vol (L/m of casing) 2.0 7.9 17.7	
Was sampling equipment pre-cleaned?	Yes		
COC updated?	Yes		

Comment: Monument has been damaged, lid is pushed off side so wont close. Well itself is not damaged and can be sampled.			
Sample Summary		Samples collected? Yes	Duplicate 1 ID:
		Lab QC collected? No	Duplicate 2 ID:
		If duplicate collected, put ID (e.g. QC101, QC201):	



Purging and Sampling Record

Well ID: 0021_MW111

Job Information		Sampling Information		Monitoring Well Information	
Client: Department of Defence		Purge Method: Low flow		SWL: 1.510 m bTOC Time SWL Measured: 12:57 PM	
Project: JBRF / HMAS Creswell OMP		Sample Method: Peri pump		Well Depth: 2.200 m bTOC Logic Check: Yes	
Proj. No.: 12626622 Base: 0021		Sample Depth: 2 m bTOC		NAPL Check: Absent Well Cap Secure? Yes	
Catchment: Mary Creek		WQuality Meter Type: YSI		NAPL Depth: m bTOC Gatic or Monument? Monument	
Sampler: ES		Flow Cell Used? Yes		Screened Interval From: 1.842 to 2.842 m bTOC	
Date: 23/10/2025		WLevel Meter Type: Interface Probe		Most recent SWL: 0.941 m bTOC (01 April 2025)	
Round: October 2025 OMP		Field Filtered? No		Historical ID (if applicable): B MW02	

Time (hh:mm)	Volume (L)	Temp (°C)	pH (pH units)	Elec.Cond (µs/cm)	Dis.Oxygen (mg/L)	Ox-Red Pt. (± mV)	SWL (m bTOC)	Comment:
Stable when (3 consecutive readings):		+/- 0.2 °C	+/- 0.05 pH	+/- 3%	+/- 10%	+/- 10 mV	stable	Colour, turbidity, sediment load, sheen, odour, flow rate, purged dry?
13:04	0.30	18.9	5.17	92.9	4.51	20.3	1.590	Pale brown, slightly turbid, no odour or sheen. Low water volume
13:07	0.70	18.7	4.79	90.8	1.72	1.7	1.590	
13:10	1.10	18.4	4.70	89.0	1.04	-18.0	1.590	Pale brown, slightly turbid, no odour or sheen. Good recharge.
13:13	1.50	18.4	4.68	87.9	0.64	-33.3	1.590	
13:16	1.90	18.4	4.76	87.5	0.55	-48.8	1.590	
13:19	2.20	18.6	4.84	87.5	0.50	-58.9	1.590	Pale yellow, slightly turbid, no odour or sheen. Good recharge.
13:22	2.60	18.5	4.88	87.0	0.40	-66.7	1.590	
13:25	3.00	18.6	4.88	86.8	0.31	-71.1	1.590	
13:28	3.40	18.7	4.93	86.8	0.29	-76.3	1.590	Pale yellow, slightly turbid, no odour or sheen. Good recharge.
13:31	3.80	18.8	4.99	87.0	0.28	-79.8	1.590	
13:34	4.20	18.9	4.99	87.0	0.28	-82.2	1.590	
13:37	4.60	18.8	5.01	86.8	0.28	-84.8	1.590	Pale yellow, slightly turbid, no odour or sheen. Good recharge.
								Parameters stable, samples collected.

Field QA Checks:		Purge Volumes	
Air bubbles in vials or violent reactions?	No	Casing Int. Dia (mm) 50 100 150	
Decontamination as per GHD procedure?	Yes	Vol (L/m of casing) 2.0 7.9 17.7	
Was sampling equipment pre-cleaned?	Yes		
COC updated?	Yes		

Comment:			
Sample Summary			
Samples collected?	Yes	If duplicate collected, put	Duplicate 1 ID:
Lab QC collected?	No	ID (e.g. QC101, QC201):	Duplicate 2 ID:

Purging and Sampling Record



Purging and Sampling Record

Well ID: 0021_MW118

Job Information		Sampling Information		Monitoring Well Information			
Client: Department of Defence		Purge Method:	Low flow	SWL:	0.420 m bTOC	Time SWL Measured:	10:56 AM
Project: JBRF / HMAS Creswell OMP		Sample Method:	Peri pump	Well Depth:	2.910 m bTOC	Logic Check:	Yes
Proj. No.: 12626622 Base: 0021		Sample Depth:	2.8 m bTOC	NAPL Check:	Absent	Well Cap Secure?	Yes
Catchment: Flatrock Creek		WQuality Meter Type:	YSI	NAPL Depth:	m bTOC	Gatic or Monument?	Gatic
Sampler: AK		Flow Cell Used?	Yes	Screened Interval From: 0.965 to 2.965 m bTOC			
Date: 21/10/2025		WLevel Meter Type:	Interface Probe	Most recent SWL: 0.436 m bTOC (02 April 2025)			
Round: October 2025 OMP		Field Filtered?	No	Historical ID (if applicable): C MW02			

Time (hh:mm)	Volume (L)	Temp (°C)	pH (pH units)	Elec.Cond (µs/cm)	Dis.Oxygen (mg/L)	Ox-Red Pt. (± mV)	SWL (m bTOC)	Comment: Colour, turbidity, sediment load, sheen, odour, flow rate, purged dry?
Stable when (3 consecutive readings):		+/- 0.2 °C	+/- 0.05 pH	+/- 3%	+/- 10%	+/- 10 mV	stable	
11:04	0.50	19.9	6.79	1338.0	0.10	-107.4	0.750	Cloudy and opaque, grey, no odour, sheen or sediment
11:07	1.00	19.8	6.80	1296.0	0.06	-124.9	0.900	Cloudy, grey, some suspended grey-orange organic matter, no odour or sheen
11:10	1.50	19.7	6.77	1207.0	0.05	-137.5	1.040	
11:12	2.00	19.7	6.74	1116.0	0.14	-137.4	1.200	Slowed pump
11:15	2.50	19.8	6.71	1053.0	0.37	-148.7	1.300	
11:21	3.00	19.7	6.67	1044.0	0.86	-174.4	1.430	Slowed pump
11:25	3.50	19.7	6.67	1082.0	0.78	-177.2	1.520	Slightly cloudy, pale grey-orange, no odour, sheen or sheen sediment
11:30	4.00	19.7	6.66	1076.0	0.66	-178.4	1.640	
11:35	4.50	19.6	6.67	1102.0	0.53	-179.8	1.750	
11:40	5.00	19.6	6.67	1107.0	0.52	-180.5	1.780	
11:45	5.50	19.5	6.68	1120.0	0.45	-180.6	1.830	Mostly clear, orange tinge, no odour, sheen or sediment
								Parameters mostly stable, samples taken

Field QA Checks:		Purge Volumes	
Air bubbles in vials or violent reactions?	No	Casing Int. Dia (mm) 50 100 150	
Decontamination as per GHD procedure?	Yes	Vol (L/m of casing) 2.0 7.9 17.7	
Was sampling equipment pre-cleaned?	Yes		
COC updated?	Yes		

Comment:			
Sample Summary			
Samples collected?	Yes	If duplicate collected, put	Duplicate 1 ID: 0021_QC140_251021
Lab QC collected?	No	ID (e.g. QC101, QC201):	Duplicate 2 ID: 0021_QC240_251021



Purging and Sampling Record

Well ID: 0021_MW121

Job Information		Sampling Information		Monitoring Well Information	
Client: Department of Defence		Purge Method: Low flow		SWL: 0.770 m bTOC Time SWL Measured: 11:50 AM	
Project: JBRF / HMAS Creswell OMP		Sample Method: Peri pump		Well Depth: 2.580 m bTOC Logic Check: Yes	
Proj. No.: 12626622 Base: 0021		Sample Depth: 2.3 m bTOC		NAPL Check: Absent Well Cap Secure? Yes	
Catchment: Captains Lagoon		WQuality Meter Type: YSI		NAPL Depth: m bTOC Gatic or Monument? Gatic	
Sampler: ES		Flow Cell Used? Yes		Screened Interval From: 0.702 to 2.702 m bTOC	
Date: 22/10/2025		WLevel Meter Type: Interface Probe		Most recent SWL: 0.31 m bTOC (02 April 2025)	
Round: October 2025 OMP		Field Filtered? No		Historical ID (if applicable): C MW05	

Time (hh:mm)	Volume (L)	Temp (°C)	pH (pH units)	Elec.Cond (µs/cm)	Dis.Oxygen (mg/L)	Ox-Red Pt. (± mV)	SWL (m bTOC)	Comment:
Stable when (3 consecutive readings):		+/- 0.2 °C	+/- 0.05 pH	+/- 3%	+/- 10%	+/- 10 mV	stable	Colour, turbidity, sediment load, sheen, odour, flow rate, purged dry?
11:57	0.50	19.5	5.75	397.6	1.13	-133.0	0.800	Pale yellow, slightly turbid, no odour or sheen.
12:00	0.80	19.4	5.66	389.5	0.31	-170.6	0.835	
12:03	1.10	20.4	5.80	387.8	0.18	-197.1	0.900	Pale yellow, slightly turbid, no odour or sheen.
12:06	1.40	20.5	5.85	373.0	0.16	-201.0	0.950	
12:09	1.70	20.6	5.91	360.0	0.11	-225.2	0.990	Pale yellow, slightly turbid, no odour or sheen.
12:12	2.00	20.2	5.89	321.6	0.12	-231.9	1.080	
12:15	2.30	20.2	5.88	315.0	0.22	-210.0	1.130	Pale yellow, slightly turbid, no odour or sheen.
12:18	2.60	20.2	5.87	304.0	0.35	-202.1	1.180	Peri pump issues
12:21	2.90	20.2	5.95	323.1	0.30	-203.5	1.210	Pale yellow, slightly turbid, no odour or sheen.
12:24	3.20	20.2	5.95	335.3	0.22	-207.1	1.240	
12:27	3.50	20.2	5.91	350.8	0.19	-208.8	1.280	Pale yellow, slightly turbid, no odour or sheen.
								Parameters mostly stable, samples collected. Magpie keeps swooping
								the work area making continued sampling tedious.

Field QA Checks:		Purge Volumes	
Air bubbles in vials or violent reactions?	No	Casing Int. Dia (mm) 50 100 150	
Decontamination as per GHD procedure?	Yes	Vol (L/m of casing) 2.0 7.9 17.7	
Was sampling equipment pre-cleaned?	Yes		
COC updated?	Yes		

Comment: Magpie swooping work area			
Sample Summary			
Samples collected?	Yes	If duplicate collected, put	Duplicate 1 ID:
Lab QC collected?	No	ID (e.g. QC101, QC201):	Duplicate 2 ID:



Purging and Sampling Record

Well ID: 0021_MW125

Job Information		Sampling Information		Monitoring Well Information	
Client: Department of Defence		Purge Method:	Low flow	SWL:	1.360 m bTOC
Project: JBRF / HMAS Creswell OMP		Sample Method:	Peri pump	Well Depth:	3.655 m bTOC
Proj. No.: 12626622	Base: 0021	Sample Depth:	3.5 m bTOC	NAPL Check:	Absent
Catchment: Flatrock Creek		WQuality Meter Type:	YSI	NAPL Depth:	m bTOC
Sampler: ES		Flow Cell Used?	Yes	Screened Interval From:	1.953 to 3.953 m bTOC
Date: 22/10/2025		WLevel Meter Type:	Interface Probe	Most recent SWL: 1.279 m bTOC (02 April 2025)	
Round: October 2025 OMP		Field Filtered?	No	Historical ID (if applicable): FC MW01	

Time (hh:mm)	Volume (L)	Temp (°C)	pH (pH units)	Elec.Cond (µs/cm)	Dis.Oxygen (mg/L)	Ox-Red Pt. (± mV)	SWL (m bTOC)	Comment:
Stable when (3 consecutive readings):		+/- 0.2 °C	+/- 0.05 pH	+/- 3%	+/- 10%	+/- 10 mV	stable	Colour, turbidity, sediment load, sheen, odour, flow rate, purged dry?
08:54	0.50	18.0	5.22	167.0	0.60	-172.2	1.570	Colourless, clear, some suspended brown particles, moderate organic
08:57	0.75	18.0	5.13	164.9	0.26	-183.9	1.670	odour, no sheen. Poor recharge.
09:00	1.00	18.0	5.13	165.1	0.24	-190.9	1.785	
09:03	1.25	17.9	5.12	165.0	0.20	-193.0	1.920	
09:06	1.50	17.8	5.11	165.1	0.17	-196.4	2.110	Pale yellow, suspended brown particles, slightly turbid, no odour or sheen.
09:09	1.75	17.9	5.17	166.2	0.13	-194.3	2.250	
09:12	2.00	17.9	5.19	167.0	0.20	-181.9	2.400	Poor recharge
09:15	2.25	17.9	5.19	167.2	0.24	-177.2	2.530	Pale yellow, suspended brown particles, slightly turbid, no odour or sheen.
09:18	2.50	18.1	5.22	167.9	0.28	-161.5	2.670	
09:21	2.75	18.2	5.24	167.9	0.32	-141.1	2.800	Pale yellow, suspended brown particles, slightly turbid, no odour or sheen.
09:24	3.00	18.1	5.29	166.5	0.36	-124.3	2.940	Very poor recharge.
09:27	3.25	18.1	5.30	166.0	0.39	-100.8	3.070	Pale yellow, suspended brown particles, slightly turbid, no odour or sheen.
								2 of 5 parameters stabilised but samples collected due to low water volume.
								Well purged dry after sample collection, no observed recharge.

Field QA Checks:		Purge Volumes	
Air bubbles in vials or violent reactions?	No		
Decontamination as per GHD procedure?	Yes	Casing Int. Dia (mm) 50 100 150	
Was sampling equipment pre-cleaned?	Yes	Vol (L/m of casing) 2.0 7.9 17.7	
COC updated?	Yes		

Comment:			
Sample Summary			
Samples collected?	Yes	If duplicate collected, put	Duplicate 1 ID:
Lab QC collected?	No	ID (e.g. QC101, QC201):	Duplicate 2 ID:



Purging and Sampling Record

Well ID: 0021_MW126

Job Information	Sampling Information	Monitoring Well Information
Client: Department of Defence	Purge Method: Low flow	SWL: 1.190 m bTOC Time SWL Measured: 09:52 AM
Project: JBRF / HMAS Creswell OMP	Sample Method: Peri pump	Well Depth: 9.700 m bTOC Logic Check: Yes
Proj. No.: 12626622 Base: 0021	Sample Depth: 9 m bTOC	NAPL Check: Absent Well Cap Secure? Yes
Catchment: Flatrock Creek	WQuality Meter Type: YSI	NAPL Depth: m bTOC Gatic or Monument? Monument
Sampler: ES	Flow Cell Used? Yes	Screened Interval From: 6.741 to 9.741 m bTOC
Date: 22/10/2025	WLevel Meter Type: Interface Probe	Most recent SWL: 1.09 m bTOC (01 April 2025)
Round: October 2025 OMP	Field Filtered? No	Historical ID (if applicable): FC MW02

Time (hh:mm)	Volume (L)	Temp (°C)	pH (pH units)	Elec.Cond (µs/cm)	Dis.Oxygen (mg/L)	Ox-Red Pt. (± mV)	SWL (m bTOC)	Comment:
Stable when (3 consecutive readings):		+/- 0.2 °C	+/- 0.05 pH	+/- 3%	+/- 10%	+/- 10 mV	stable	Colour, turbidity, sediment load, sheen, odour, flow rate, purged dry?
09:54	0.50	17.2	5.70	451.2	1.23	-30.0	1.330	Brown, moderately turbid, some suspended brown particles, no odour
09:57	1.00	17.2	5.61	449.8	0.37	-27.3	1.485	No sheen. Flooded screen,
10:00	1.50	17.2	5.60	449.5	0.18	-28.2	1.600	As above. Reduced purge rate
10:03	1.80	17.4	5.69	452.6	0.12	-33.9	1.645	
10:06	2.10	17.4	5.71	454.0	0.10	-37.0	1.690	Orange, moderately turbid, no odour or sheen. Poor recharge.
10:09	2.40	17.5	5.75	456.4	0.08	-46.1	1.740	
10:12	2.70	17.6	5.77	458.1	0.07	-53.6	1.780	Orange, moderately turbid, no odour or sheen. Poor recharge.
10:15	3.00	17.6	5.82	462.8	0.05	-71.2	1.810	
10:18	3.30	17.7	5.83	464.7	0.05	-81.4	1.830	Orange, slightly turbid, no odour or sheen. Ok recharge.
10:21	3.60	17.7	5.84	467.2	0.04	-92.2	1.850	
10:24	3.90	17.7	5.87	469.6	0.04	-102.1	1.870	Pale yellow, slightly turbid, no odour or sheen. Ok recharge.
10:27	4.20	17.7	5.88	469.7	0.03	-106.6	1.890	
10:30	4.50	17.6	5.86	470.0	0.03	-111.1	1.910	Pale yellow, slightly turbid, no odour or sheen. Ok recharge.
10:33	4.80	17.5	5.86	469.7	0.03	-115.4	1.930	Pale yellow, slightly turbid, no odour or sheen. Ok recharge.
								Parameters stable, samples collected.

Field QA Checks:		Purge Volumes
Air bubbles in vials or violent reactions?	No	Casing Int. Dia (mm) 50 100 150
Decontamination as per GHD procedure?	Yes	Vol (L/m of casing) 2.0 7.9 17.7
Was sampling equipment pre-cleaned?	Yes	
COC updated?	Yes	

Comment:		
Sample Summary	Samples collected? Yes	Duplicate 1 ID:
	Lab QC collected? No	Duplicate 2 ID:
	If duplicate collected, put ID (e.g. QC101, QC201):	



Purging and Sampling Record

Well ID: 0021_MW127

Job Information		Sampling Information		Monitoring Well Information	
Client: Department of Defence		Purge Method: Low flow		SWL: 1.315 m bTOC Time SWL Measured: 01:07 PM	
Project: JBRF / HMAS Creswell OMP		Sample Method: Peri pump		Well Depth: 6.630 m bTOC Logic Check: Yes	
Proj. No.: 12626622 Base: 0021		Sample Depth: 6.3 m bTOC		NAPL Check: Absent Well Cap Secure? Yes	
Catchment: Captains Lagoon		WQuality Meter Type: YSI		NAPL Depth: m bTOC Gatic or Monument? Gatic	
Sampler: ES		Flow Cell Used? Yes		Screened Interval From: 3.977 to 6.977 m bTOC	
Date: 22/10/2025		WLevel Meter Type: Interface Probe		Most recent SWL: 1.412 m bTOC (02 April 2025)	
Round: October 2025 OMP		Field Filtered? No		Historical ID (if applicable): FC MW03	

Time (hh:mm)	Volume (L)	Temp (°C)	pH (pH units)	Elec.Cond (µs/cm)	Dis.Oxygen (mg/L)	Ox-Red Pt. (± mV)	SWL (m bTOC)	Comment:
Stable when (3 consecutive readings):		+/- 0.2 °C	+/- 0.05 pH	+/- 3%	+/- 10%	+/- 10 mV	stable	Colour, turbidity, sediment load, sheen, odour, flow rate, purged dry?
13:14	0.50	20.0	3.98	649.0	0.58	-31.0	1.365	Brown, clear, with suspended brown organic flakes, no odour or sheen
13:17	0.90	19.7	3.98	637.0	0.24	-43.0	1.370	Good recharge.
13:20	1.30	19.8	4.03	636.0	0.15	-50.8	1.370	Brown, clear, with suspended brown organic flakes, no odour or sheen
13:23	1.70	19.8	4.08	637.0	0.10	-59.1	1.370	
13:26	2.10	19.8	4.07	640.0	0.08	-62.3	1.370	Colourless, clear, some suspended brown organic flakes, no odour or sheen
13:29	2.50	19.8	4.07	641.0	0.07	-64.5	1.370	
13:32	2.90	19.6	4.06	639.0	0.05	-71.0	1.370	Colourless, clear, some suspended brown organic flakes, no odour or sheen
13:35	3.30	19.7	4.07	639.0	0.04	-77.6	1.370	
13:38	3.70	19.6	4.06	639.0	0.03	-78.0	1.370	Colourless, clear, trace suspended brown organic flakes, no odour or sheen
13:41	4.10	19.5	4.05	638.0	0.03	-82.2	1.370	Good recharge.
13:44	4.40	19.5	4.04	638.0	0.03	-84.2	1.370	Colourless, slightly turbid, trace suspended brown particles, no odour or sheen.
								Parameters stable, samples collected.

Field QA Checks:		Purge Volumes	
Air bubbles in vials or violent reactions?	No	Casing Int. Dia (mm) 50 100 150	
Decontamination as per GHD procedure?	Yes	Vol (L/m of casing) 2.0 7.9 17.7	
Was sampling equipment pre-cleaned?	Yes		
COC updated?	Yes		

Comment:			
Sample Summary			
Samples collected?	Yes	If duplicate collected, put	Duplicate 1 ID:
Lab QC collected?	No	ID (e.g. QC101, QC201):	Duplicate 2 ID:



Purging and Sampling Record

Well ID: 0021_MW129

Job Information		Sampling Information		Monitoring Well Information	
Client: Department of Defence		Purge Method:	Low flow	SWL:	16.361 m bTOC
Project: JBRF / HMAS Creswell OMP		Sample Method:	Micropurge	Well Depth:	31.470 m bTOC
Proj. No.: 12626622	Base: 0021	Sample Depth:	29.75 m bTOC	NAPL Check:	Absent
Catchment: Lakes		WQuality Meter Type:	YSI	NAPL Depth:	m bTOC
Sampler: AD		Flow Cell Used?	Yes	Screened Interval From:	27.055 to 31.555 m bTOC
Date: 21/10/2025		WLevel Meter Type:	Interface Probe	Most recent SWL:	19.324 m bTOC (04 April 2025)
Round: October 2025 OMP		Field Filtered?	No	Historical ID (if applicable):	LM MW02

Time (hh:mm)	Volume (L)	Temp (°C)	pH (pH units)	Elec.Cond (µs/cm)	Dis.Oxygen (mg/L)	Ox-Red Pt. (± mV)	SWL (m bTOC)	Comment:
Stable when (3 consecutive readings):		+/- 0.2 °C	+/- 0.05 pH	+/- 3%	+/- 10%	+/- 10 mV	stable	Colour, turbidity, sediment load, sheen, odour, flow rate, purged dry?
12:18	1.00	15.9	5.32	319.4	0.67	5.8	16.650	Clear, no odour, no sheen, no settings
12:23	2.00	15.9	4.99	323.0	0.41	-15.4	17.061	Adjusted settings on pump to try reduce drawdown
12:28	3.00	15.9	4.81	315.7	0.35	-14.2	17.531	
12:33	4.00	16.0	4.75	310.7	0.23	-11.7	17.917	
12:38	5.00	16.0	4.75	305.5	0.19	-13.7	18.294	Some recharge
12:43	6.00	16.0	4.74	300.1	0.13	-16.4	18.662	
12:48	7.00	16.0	4.73	296.9	0.13	-19.6	19.009	
12:53	8.00	16.0	4.73	295.3	0.11	-22.0	19.300	
12:58	9.00	16.1	4.72	294.1	0.10	-24.3	19.631	
13:03	10.00	16.0	4.76	292.4	0.09	-28.2	19.940	
13:08	11.00	16.0	4.77	291.3	0.09	-33.2	20.245	
13:13	12.00	16.0	4.78	290.3	0.09	-37.9	20.525	Clear, no odour, no sheen, no sediment.
								Parameters stable, samples collected

Field QA Checks:		Purge Volumes	
Air bubbles in vials or violent reactions?	No		
Decontamination as per GHD procedure?	Yes	Casing Int. Dia (mm) 50 100 150	
Was sampling equipment pre-cleaned?	Yes	Vol (L/m of casing) 2.0 7.9 17.7	
COC updated?	Yes		

Comment:			
Sample Summary			
Samples collected?	Yes	If duplicate collected, put	Duplicate 1 ID:
Lab QC collected?	No	ID (e.g. QC101, QC201):	Duplicate 2 ID:



Purging and Sampling Record

Well ID: 0021_MW130

Job Information		Sampling Information		Monitoring Well Information	
Client: Department of Defence		Purge Method: Low flow		SWL: 6.585 m bTOC Time SWL Measured: 35.954 m bTOC	
Project: JBRF / HMAS Creswell OMP		Sample Method: Peri pump		Well Depth: 35.690 m bTOC Logic Check: Yes	
Proj. No.: 12626622 Base: 0021		Sample Depth: 34 m bTOC		NAPL Check: Absent Well Cap Secure? Yes	
Catchment: Lakes		WQuality Meter Type: YSI		NAPL Depth: m bTOC Gatic or Monument? Monument	
Sampler: AD		Flow Cell Used? Yes		Screened Interval From: 26.954 to 35.954 m bTOC	
Date: 21/10/2025		WLevel Meter Type: Interface Probe		Most recent SWL: 7.724 m bTOC (04 April 2025)	
Round: October 2025 OMP		Field Filtered? No		Historical ID (if applicable): LW MW01	

Time (hh:mm)	Volume (L)	Temp (°C)	pH (pH units)	Elec.Cond (µs/cm)	Dis.Oxygen (mg/L)	Ox-Red Pt. (± mV)	SWL (m bTOC)	Comment:
Stable when (3 consecutive readings):		+/- 0.2 °C	+/- 0.05 pH	+/- 3%	+/- 10%	+/- 10 mV	stable	Colour, turbidity, sediment load, sheen, odour, flow rate, purged dry?
14:39	1.00	17.6	5.40	418.6	5.45	160.2	7.085	Clear, no odour, no sheen, trace suspended grey sediment
14:46	1.50	18.1	5.49	420.3		146.6	7.152	Pump reduced to slowest setting
14:54	2.00	18.1	5.63	408.1	4.01	116.1	7.212	Poor recharge
15:01	2.50	17.7	5.69	399.1	3.68	109.2	7.301	
15:08	3.00	17.7	5.93	371.7	3.10	52.6	7.361	
15:15	3.50	17.7	6.00	360.4	2.86	15.2	7.405	
15:22	4.00	17.7	6.12	344.2	2.50	-27.8	7.460	
15:30	4.50	17.6	6.13	333.5	2.21	-51.7	7.500	
15:37	5.00	17.5	6.13	331.0	1.69	-65.0	7.545	
15:45	5.50	17.5	6.13	331.6	1.86	-66.8	7.590	
15:52	6.00	17.5	6.13	334.5	1.74	-67.6	7.620	Clear, no odour, no sheen, trace suspended grey sediment. Poor recharge.
								Parameters stable, samples collected

Field QA Checks:		Purge Volumes	
Air bubbles in vials or violent reactions?	No	Casing Int. Dia (mm) 50 100 150	
Decontamination as per GHD procedure?	Yes	Vol (L/m of casing) 2.0 7.9 17.7	
Was sampling equipment pre-cleaned?	Yes		
COC updated?	Yes		

Comment:			
Sample Summary			
Samples collected?	Yes	If duplicate collected, put	Duplicate 1 ID:
Lab QC collected?	Yes	ID (e.g. QC101, QC201):	Duplicate 2 ID:



Purging and Sampling Record

Well ID: 0021_MW134

Job Information		Sampling Information		Monitoring Well Information	
Client: Department of Defence		Purge Method: Low flow		SWL: 4.120 m bTOC Time SWL Measured: 03:06 PM	
Project: JBRF / HMAS Creswell OMP		Sample Method: Peri pump		Well Depth: 7.690 m bTOC Logic Check: Yes	
Proj. No.: 12626622 Base: 0021		Sample Depth: 7.3 m bTOC		NAPL Check: Absent Well Cap Secure? Yes	
Catchment: Captains Lagoon		WQuality Meter Type: YSI		NAPL Depth: m bTOC Gatic or Monument? Monument	
Sampler: ES		Flow Cell Used? Yes		Screened Interval From: 4.946 to 7.946 m bTOC	
Date: 22/10/2025		WLevel Meter Type: Interface Probe		Most recent SWL: 5.34 m bTOC (02 April 2025)	
Round: October 2025 OMP		Field Filtered? No		Historical ID (if applicable): TC MW01	

Time (hh:mm)	Volume (L)	Temp (°C)	pH (pH units)	Elec.Cond (µs/cm)	Dis.Oxygen (mg/L)	Ox-Red Pt. (± mV)	SWL (m bTOC)	Comment:
Stable when (3 consecutive readings):		+/- 0.2 °C	+/- 0.05 pH	+/- 3%	+/- 10%	+/- 10 mV	stable	Colour, turbidity, sediment load, sheen, odour, flow rate, purged dry?
15:16	0.50	20.8	4.18	254.5	2.98	208.0	4.170	Pale grey-white, highly turbid, no odour or sheen. Good recharge.
15:19	1.00	20.4	3.86	254.7	2.71	222.5	4.180	Reduced purge rate for stable SWL
15:22	1.40	21.0	3.96	257.0	2.47	211.4	4.170	Pale grey-white, highly turbid, no odour or sheen. Good recharge.
15:25	1.80	21.2	4.00	258.9	2.39	210.2	4.170	White, moderately turbid, no odour or sheen. Good recharge.
15:28	2.20	21.2	4.08	259.0	2.33	210.2	4.170	
15:31	2.60	20.8	3.99	256.2	2.38	216.2	4.170	White, moderately turbid, no odour or sheen. Good recharge.
15:34	3.00	20.6	3.99	255.1	2.49	216.3	4.170	
15:37	3.40	20.2	3.93	252.9	2.63	219.3	4.170	Colourless, slightly turbid, no odour or sheen. Good recharge.
15:40	3.80	20.3	3.97	253.7	2.62	216.4	4.170	
15:43	4.20	20.3	4.00	253.1	2.55	214.3	4.170	Colourless, slightly turbid, no odour or sheen. Good recharge.
15:46	4.60	20.2	4.01	253.6	2.61	212.2	4.170	Colourless, slightly turbid, no odour or sheen. Good recharge.
								Parameters stable, samples collected.

Field QA Checks:		Purge Volumes	
Air bubbles in vials or violent reactions?	No	Casing Int. Dia (mm) 50 100 150 Vol (L/m of casing) 2.0 7.9 17.7	
Decontamination as per GHD procedure?	Yes		
Was sampling equipment pre-cleaned?	Yes		
COC updated?	Yes		

Comment: YSI flow cell in shade but hot weather and ground which may influence temperature readings. Confirmed DO is not in percentage.			
Sample Summary			
Samples collected?	Yes	If duplicate collected, put	Duplicate 1 ID: 0021_QC127_251022
Lab QC collected?	No	ID (e.g. QC101, QC201):	Duplicate 2 ID: 0021_QC227_251022



Purging and Sampling Record

Well ID: 0021_MW135

Job Information		Sampling Information		Monitoring Well Information					
Client: Department of Defence		Purge Method:	Low flow	SWL:	11.286 m bTOC	Time SWL Measured:	09:46 AM		
Project: JBRF / HMAS Creswell OMP		Sample Method:	Micropurge	Well Depth:	40.880 m bTOC	Logic Check:	Yes		
Proj. No.:	12626622	Base:	0021	Sample Depth:	36.53 m bTOC	NAPL Check:	Absent	Well Cap Secure?	Yes
Catchment: Lakes		WQuality Meter Type:	YSI	NAPL Depth:	m bTOC	Gatic or Monument?	Monument		
Sampler: AD		Flow Cell Used?	Yes	Screened Interval From: 31.866 to 40.866 m bTOC					
Date: 22/10/2025		WLevel Meter Type:	Interface Probe	Most recent SWL: 12.28 m bTOC (04 April 2025)					
Round: October 2025 OMP		Field Filtered?	No	Historical ID (if applicable): LM MW03A					

Time (hh:mm)	Volume (L)	Temp (°C)	pH (pH units)	Elec.Cond (µs/cm)	Dis.Oxygen (mg/L)	Ox-Red Pt. (± mV)	SWL (m bTOC)	Comment:
Stable when (3 consecutive readings):		+/- 0.2 °C	+/- 0.05 pH	+/- 3%	+/- 10%	+/- 10 mV	stable	Colour, turbidity, sediment load, sheen, odour, flow rate, purged dry?
10:24	1.00						11.490	No parameters as WQM battery flat, change batteries
10:26								Replaced gas bottle, other bottle empty, restarted pump
10:36	2.00	17.4	5.35	329.9	0.41	72.0	11.710	Yellow-green tinge, clear, organic odour, no sheen
10:40	3.00	17.5	5.15	314.9	0.23	105.8	11.960	Yellow tinge, clear, no odour, no sheen, no sediment
10:44	4.00	17.4	5.07	309.5	0.19	120.1	12.130	
10:48	5.00	17.4	5.04	304.8	0.19	128.6	12.280	
10:52	6.00	17.5	5.04	302.4	0.12	131.4	12.390	Pale yellow tinge, clear, no odour, no sheen, no sediment
10:56	7.00	17.4	5.08	300.2	0.15	129.2	12.490	
11:01	8.00	17.4	5.09	298.4	0.10	126.8	12.570	
11:05	9.00	17.4	5.11	297.3	0.08	125.1	12.630	
11:09	10.00	17.4	5.13	296.2	0.09	118.3	12.670	
11:13	11.00	17.4	5.09	295.7	0.08	115.0	11.700	
11:17	12.00	17.4	5.09	294.6	0.06	101.4	12.730	Good recharge
11:21	13.00	17.3	5.07	293.6	0.05	75.4	12.760	
11:25	14.00	17.4	5.04	293.1	0.05	56.3	11.790	
11:29	15.00	17.4	5.04	292.1	0.04	43.4	11.840	
11:34	16.00	17.4	5.04	291.2	0.04	29.5		Pale yellow tinge, clear, no odour, no sheen, no sediment. Good recharge.
								Parameters except ORP stable, samples collected. Gas bottle almost empty

Field QA Checks:		Purge Volumes	
Air bubbles in vials or violent reactions?	No		
Decontamination as per GHD procedure?	Yes	Casing Int. Dia (mm) 50 100 150	
Was sampling equipment pre-cleaned?	Yes	Vol (L/m of casing) 2.0 7.9 17.7	
COC updated?	Yes		

Comment:			
Sample Summary			
Samples collected?	Yes	If duplicate collected, put	Duplicate 1 ID:
Lab QC collected?	Yes	ID (e.g. QC101, QC201):	Duplicate 2 ID:



Purging and Sampling Record

Well ID: 0021_MW136

Job Information		Sampling Information		Monitoring Well Information	
Client: Department of Defence		Purge Method: Low flow		SWL: 4.860 m bTOC Time SWL Measured: 09:51 AM	
Project: JBRF / HMAS Creswell OMP		Sample Method: Peri pump		Well Depth: 26.660 m bTOC Logic Check: Yes	
Proj. No.: 12626622 Base: 0021		Sample Depth: 25 m bTOC		NAPL Check: Absent Well Cap Secure? Yes	
Catchment: Lakes		WQuality Meter Type: YSI		NAPL Depth: m bTOC Gatic or Monument? Monument	
Sampler: AK		Flow Cell Used? Yes		Screened Interval From: 20.741 to 26.741 m bTOC	
Date: 22/10/2025		WLevel Meter Type: Interface Probe		Most recent SWL: 6.37 m bTOC (04 April 2025)	
Round: October 2025 OMP		Field Filtered? No		Historical ID (if applicable): LM MW03B	

Time (hh:mm)	Volume (L)	Temp (°C)	pH (pH units)	Elec.Cond (µs/cm)	Dis.Oxygen (mg/L)	Ox-Red Pt. (± mV)	SWL (m bTOC)	Comment:
Stable when (3 consecutive readings):		+/- 0.2 °C	+/- 0.05 pH	+/- 3%	+/- 10%	+/- 10 mV	stable	Colour, turbidity, sediment load, sheen, odour, flow rate, purged dry?
10:38	0.50	20.5	4.75	654.0	1.09	-128.2	4.880	
10:42	1.00	20.5	4.75	654.0	1.08	-129.0	4.910	Clear, weak egg/sulfur odour, no sheen or sediment
10:46	1.50	20.3	4.82	614.0	0.77	-141.8	4.920	
10:50	2.00	20.3	4.82	613.0	0.76	-142.6	4.950	
10:55	2.50	20.3	4.83	546.0	0.62	-148.3	4.950	Slowed pump
11:00	3.00	20.2	4.84	497.0	0.49	-154.7	4.950	Clear, very slight orange, moderate egg/sulfur odour, no sheen or sediment
11:05	3.50	20.0	4.84	475.0	0.88	-160.1	4.950	
11:10	4.00	19.9	4.85	482.0	0.23	-166.3	4.960	Good recharge, slowed pump slightly
11:16	4.50	19.8	4.85	473.0	0.20	-171.1	4.965	
11:24	5.00	19.7	4.85	466.6	0.16	-173.9	4.970	
11:31	5.50	19.6	4.84	461.0	0.15	-176.6	4.975	
11:38	6.00	19.6	4.85	453.1	0.15	-177.0	4.980	Clear, very slight orange, moderate egg/sulfur odour, no sheen or sediment
								Parameters and recharge stable, samples taken

Field QA Checks:		Purge Volumes	
Air bubbles in vials or violent reactions?	No		
Decontamination as per GHD procedure?	Yes	Casing Int. Dia (mm) 50 100 150	
Was sampling equipment pre-cleaned?	Yes	Vol (L/m of casing) 2.0 7.9 17.7	
COC updated?	Yes		

Comment:			
Sample Summary			
Samples collected?	Yes	If duplicate collected, put	Duplicate 1 ID: 0021_QC141_251022
Lab QC collected?	No	ID (e.g. QC101, QC201):	Duplicate 2 ID: 0021_QC241_251022



Purging and Sampling Record

Well ID: 0021_MW160

Job Information		Sampling Information		Monitoring Well Information	
Client: Department of Defence		Purge Method: Low flow		SWL: 2.350 m bTOC Time SWL Measured: 03:35 PM	
Project: JBRF / HMAS Creswell OMP		Sample Method: Peri pump		Well Depth: 6.865 m bTOC Logic Check: Yes	
Proj. No.: 12626622 Base: 0021		Sample Depth: 6.5 m bTOC		NAPL Check: Absent Well Cap Secure? Yes	
Catchment: Flatrock Creek		WQuality Meter Type: YSI		NAPL Depth: m bTOC Gatic or Monument? Monument	
Sampler: ES		Flow Cell Used? Yes		Screened Interval From: 3.943 to 6.943 m bTOC	
Date: 21/10/2025		WLevel Meter Type: Interface Probe		Most recent SWL: 2.586 m bTOC (02 April 2025)	
Round: October 2025 OMP		Field Filtered? No		Historical ID (if applicable): NA	

Time (hh:mm)	Volume (L)	Temp (°C)	pH (pH units)	Elec.Cond (µs/cm)	Dis.Oxygen (mg/L)	Ox-Red Pt. (± mV)	SWL (m bTOC)	Comment:
Stable when (3 consecutive readings):		+/- 0.2 °C	+/- 0.05 pH	+/- 3%	+/- 10%	+/- 10 mV	stable	Colour, turbidity, sediment load, sheen, odour, flow rate, purged dry?
15:39	0.50	17.7	4.85	27.5	1.40	49.0	2.390	Pale yellow, slightly turbid, no odour or sheen. Good recharge.
15:42	1.00	17.6	4.67	220.3	0.27	81.0	2.390	
15:45	1.50	17.5	4.60	217.2	0.15	100.1	2.390	Pale yellow, clear, no odour or sheen. Good recharge.
15:48	2.00	17.5	4.58	212.4	0.10	111.7	2.390	
15:51	2.50	17.5	4.58	209.2	0.07	119.8	2.390	Pale yellow, clear, no odour or sheen. Good recharge.
15:54	3.00	17.6	4.60	204.0	0.07	123.6	2.390	
15:57	3.50	17.6	4.59	191.5	0.06	121.2	2.390	Pale yellow, clear, no odour or sheen. Good recharge.
16:00	4.00	17.5	4.59	186.0	0.05	127.1	2.390	
16:03	4.50	17.5	4.56	181.9	0.05	94.5	2.390	Pale yellow, clear, no odour or sheen. Good recharge.
16:06	5.00	17.5	4.54	184.2	0.05	49.6	2.390	
16:09	5.50	17.5	4.51	184.0	0.05	45.1	2.390	Pale yellow, clear, no odour or sheen. Good recharge.
16:12	6.00	17.5	4.49	186.0	0.05	40.2	2.390	Pale yellow, clear, no odour or sheen. Good recharge.
								Parameters stable, samples collected.

Field QA Checks:		Purge Volumes	
Air bubbles in vials or violent reactions?	No	Casing Int. Dia (mm) 50 100 150	
Decontamination as per GHD procedure?	Yes	Vol (L/m of casing) 2.0 7.9 17.7	
Was sampling equipment pre-cleaned?	Yes		
COC updated?	Yes		

Comment:			
Sample Summary			
Samples collected?	Yes	If duplicate collected, put	Duplicate 1 ID:
Lab QC collected?	Yes	ID (e.g. QC101, QC201):	Duplicate 2 ID:



SURFACE WATER AND SEDIMENT SAMPLING RECORD

PROJECT NO.:	12626622	SURFACE WATER ID:	0020_SW004
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	SEDIMENT ID:	
CLIENT:	Department of Defence	DATE:	20/10/2025 TIME: 11:40:00 AM
BASE / CATCHMENT:	0020 / Captains Lagoon	LOGGED BY:	LR/AD
COORDINATES/GPS (if applicable)	291407.3, 6110460.47, see Figure 4B.		
SAMPLING METHOD (ie grab, bucket; if dry leave blank)	SURFACE WATER:	Grab	SEDIMENT:

DETAILED SAMPLE LOCATION DESCRIPTION	Within Lagoon, ~15m from left bank

ENVIRONMENTAL OBSERVATIONS

WEATHER	Overcast
VEGETATION	Shrubs and trees alongside channel
SLOPE	Steep
EROSION	None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Clear, no odour, no sheen, no sediment
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	22.5
DO (mg/L)	5.47
DO (%S)	71.10
CONDUCTIVITY (µS/cm)	31261.0
pH (pH units)	7.17
REDOX (mV)	44.2
TDS (mg/L)	21320.00

HYDROLOGICAL DATA

FLOW MEASUREMENT	Stagnant
CROSS SECTION WIDTH (m)	~50
DEPTH (m)	~1
OTHER	

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0020_SW004_251020				No

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:	0020_SW005		
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	SEDIMENT ID:	0020_SD019		
CLIENT:	Department of Defence	DATE:	20/10/2025	TIME:	11:26:00 AM
BASE / CATCHMENT:	0020 / Captains Lagoon	LOGGED BY:	LR/AD		
COORDINATES/GPS (if applicable)	291429.04, 6110332.85, see Figure 4B.				
SAMPLING METHOD (ie grab, bucket; if dry leave blank)	SURFACE WATER:	Grab	SEDIMENT:	Grab	

DETAILED SAMPLE LOCATION DESCRIPTION Within Lagoon, ~15m from left bank

ENVIRONMENTAL OBSERVATIONS

WEATHER	Overcast
VEGETATION	Shrubs and trees alongside channel
SLOPE	Steep
EROSION	None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Clear, no odour, no sheen
SEDIMENT (describe as soil)	SAND, fine grained, angular to sub-angular, yellow grey, with organics and algae

FIELD MEASUREMENTS

TEMPERATURE (°C)	22.6
DO (mg/L)	4.63
DO (%S)	60.30
CONDUCTIVITY (µS/cm)	31421.0
pH (pH units)	7.10
REDOX (mV)	-66.1
TDS (mg/L)	21424.00

HYDROLOGICAL DATA

FLOW MEASUREMENT	Stagnant
CROSS SECTION WIDTH (m)	~50
DEPTH (m)	~1m
OTHER	

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0020_SW005_251020				No
0020_SD019_251020				

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:	0020_SW010		
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	SEDIMENT ID:	0020_SD024		
CLIENT:	Department of Defence	DATE:	20/10/2025	TIME:	12:37:00 PM
BASE / CATCHMENT:	0020 / Captains Lagoon	LOGGED BY:	LR/AD		
COORDINATES/GPS (if applicable)	291680.09, 6109787.76, see Figure 4E.				
SAMPLING METHOD (ie grab, bucket; if dry leave blank)	SURFACE WATER: Grab SEDIMENT: Grab				

DETAILED SAMPLE LOCATION DESCRIPTION Upstream in Captains Lagoon / Telegraph Creek

ENVIRONMENTAL OBSERVATIONS

WEATHER	Overcast
VEGETATION	Reeds lining banks
SLOPE	Low to none
EROSION	minor erosion noted upgradient

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Clear, slight tannin brown, no odour or sheen, non-turbid
SEDIMENT (describe as soil)	Organics with sand. Sand, fine to coarse, angular to sub-angular. organic odour

FIELD MEASUREMENTS

TEMPERATURE (°C)	24.1
DO (mg/L)	3.00
DO (%S)	42.40
CONDUCTIVITY (µS/cm)	32106.0
pH (pH units)	6.85
REDOX (mV)	-83.4
TDS (mg/L)	21216.00

HYDROLOGICAL DATA

FLOW MEASUREMENT	N/A
CROSS SECTION WIDTH (m)	20
DEPTH (m)	>1.0
OTHER	

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0020_SW010_251020				
0020_SD024_251020	QC101, QC201	0020_QC101_251020	0020_QC201_251020	

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:	0020_SW011
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	SEDIMENT ID:	
CLIENT:	Department of Defence	DATE:	20/10/2025 TIME: 4:28:00 PM
BASE / CATCHMENT:	0020 / Captains Lagoon	LOGGED BY:	LR/AD
COORDINATES/GPS (if applicable)	291346.1, 6109113.37, see Figure 4E.		
SAMPLING METHOD (ie grab, bucket; if dry leave blank)	SURFACE WATER:	Grab	SEDIMENT:

DETAILED SAMPLE LOCATION DESCRIPTION	Pool below very large culvert outflow.

ENVIRONMENTAL OBSERVATIONS

WEATHER	Sunny
VEGETATION	native veg lines the banks
SLOPE	low
EROSION	none evident

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Clear, brown tinge, no odour or sheen, film on the surface
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	16.6
DO (mg/L)	5.73
DO (%S)	58.80
CONDUCTIVITY (µS/cm)	136.9
pH (pH units)	5.22
REDOX (mV)	196.7
TDS (mg/L)	105.30

HYDROLOGICAL DATA

FLOW MEASUREMENT	Steady flow through culvert
CROSS SECTION WIDTH (m)	7
DEPTH (m)	>0.5
OTHER	

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0020_SW011_251020				No

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:	0020_SW012		
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	SEDIMENT ID:			
CLIENT:	Department of Defence	DATE:	20/10/2025	TIME:	11:50:00 AM
BASE / CATCHMENT:	0020 / Captains Lagoon	LOGGED BY:	LR/AD		
COORDINATES/GPS (if applicable)	291433.74, 6110572.47, see Figure 4B.				
SAMPLING METHOD (ie grab, bucket; if dry leave blank)	SURFACE WATER:	Grab	SEDIMENT:		

DETAILED SAMPLE LOCATION DESCRIPTION Sampled at beach foreshore where lagoon meets beach

ENVIRONMENTAL OBSERVATIONS

WEATHER	Overcast
VEGETATION	None
SLOPE	Gentle
EROSION	None

DESCRIPTIONS

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

FIELD MEASUREMENTS

TEMPERATURE (°C)	20.2
DO (mg/L)	4.62
DO (%S)	64.20
CONDUCTIVITY (µS/cm)	54165.0
pH (pH units)	7.91
REDOX (mV)	-49.1
TDS (mg/L)	38805.00

HYDROLOGICAL DATA

FLOW MEASUREMENT	NA, beach
CROSS SECTION WIDTH (m)	NA, beach
DEPTH (m)	<0.3
OTHER	

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0020_SW012_251020				No

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: 0020_SW016
PROJECT NAME: JBRF and HMAS Creswell PFAS OMP SEDIMENT ID:
CLIENT: Department of Defence DATE: 20/10/2025 TIME: 9:11:00 AM
BASE / CATCHMENT: 0020 / Flatrock Creek LOGGED BY: ES / AK

COORDINATES/GPS (if applicable) 290413.7, 6110320.66, see Figure 4B.
SAMPLING METHOD (ie grab, bucket; if dry leave blank) SURFACE WATER: Pole SEDIMENT:

DETAILED SAMPLE LOCATION DESCRIPTION Inside Flat Rock Creek Catchment, pond

ENVIRONMENTAL OBSERVATIONS

WEATHER Overcast
VEGETATION Grass surrounding catchment, some light shrubs on water boundary
SLOPE Very slight
EROSION None

DESCRIPTIONS

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

FIELD MEASUREMENTS

TEMPERATURE (°C) 22.4
DO (mg/L) 5.76
DO (%S) 67.00
CONDUCTIVITY (µS/cm) 408.2
pH (pH units) 7.44
REDOX (mV) 59.0
TDS (mg/L) 279.10

HYDROLOGICAL DATA

FLOW MEASUREMENT None
CROSS SECTION WIDTH (m) 100
DEPTH (m) >1
OTHER

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0020_SW016_251020				

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: 0020_SW023
PROJECT NAME: JBRF and HMAS Creswell PFAS OMP SEDIMENT ID:
CLIENT: Department of Defence DATE: 20/10/2025 TIME: 3:10:00 PM
BASE / CATCHMENT: 0020 / Flatrock Creek LOGGED BY: AD

COORDINATES/GPS (if applicable) 290912.6, 6110335.64, see Figure 4B.

SAMPLING METHOD (ie grab, bucket; if dry leave blank) SURFACE WATER: SEDIMENT:

DETAILED SAMPLE LOCATION DESCRIPTION Directly downstream of stormwater channel at road

ENVIRONMENTAL OBSERVATIONS

WEATHER Overcast
VEGETATION Grasses
SLOPE Gentle
EROSION None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen) Dry
SEDIMENT (describe as soil)

FIELD MEASUREMENTS

TEMPERATURE (°C)
DO (mg/L)
DO (%S)
CONDUCTIVITY (µS/cm)
pH (pH units)
REDOX (mV)
TDS (mg/L)

HYDROLOGICAL DATA

FLOW MEASUREMENT
CROSS SECTION WIDTH (m)
DEPTH (m)
OTHER Dry

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?

OTHER COMMENTS FOR CONSIDERATION

(e.g. health and safety, access issues, change in location, general observation, notes for future): Dry. No samples collected.



SURFACE WATER AND SEDIMENT SAMPLING RECORD

PROJECT NO.:	12626622	SURFACE WATER ID:	0020_SW026		
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	SEDIMENT ID:			
CLIENT:	Department of Defence	DATE:	20/10/2025	TIME:	10:32:00 AM
BASE / CATCHMENT:	0020 / Flatrock Creek	LOGGED BY:	ES / AK		
COORDINATES/GPS (if applicable)	290792.13, 6110775.46, see Figure 4B.				
SAMPLING METHOD (ie grab, bucket; if dry leave blank)	SURFACE WATER:	Grab	SEDIMENT:		

DETAILED SAMPLE LOCATION DESCRIPTION	On beach, before rocks, approximately 30m from bridge.

ENVIRONMENTAL OBSERVATIONS

WEATHER	Overcast
VEGETATION	None
SLOPE	Steel on southern side (Base), flat on northern side (Beach)
EROSION	None

DESCRIPTIONS

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

FIELD MEASUREMENTS

TEMPERATURE (°C)	20.1
DO (mg/L)	5.20
DO (%S)	52.50
CONDUCTIVITY (µS/cm)	50645.0
pH (pH units)	8.23
REDOX (mV)	6.6
TDS (mg/L)	36301.00

HYDROLOGICAL DATA

FLOW MEASUREMENT	Moderate, affected by waves, approximately 0.3 m/s in easterly direction
CROSS SECTION WIDTH (m)	10
DEPTH (m)	<0.5
OTHER	Low tide

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0020_SW026_251020	QC120, QC220	0020_QC120_251020	0020_QC220_251020	

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:	0020_SW027		
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	SEDIMENT ID:	0020_SD002		
CLIENT:		DATE:	20/10/2025	TIME:	11:00:00 AM
BASE / CATCHMENT:	0020 / Flatrock Creek	LOGGED BY:	ES / AK		
COORDINATES/GPS (if applicable)	290711.88, 6110653.45, see Figure 4B.				
SAMPLING METHOD (ie grab, bucket; if dry leave blank)	SURFACE WATER:	Pole	SEDIMENT:	Trowel	

DETAILED SAMPLE LOCATION DESCRIPTION Flatrock Creek, down the slope from MW068, steep hill

ENVIRONMENTAL OBSERVATIONS

WEATHER	Overcast
VEGETATION	Bush scrub, lots of leaf litter, trees overhanging
SLOPE	Very steep
EROSION	No

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Pale yellow, clear, no odour or sheen
SEDIMENT (describe as soil)	SAND, grey-brown, fine to medium, saturated, no odour or staining.

FIELD MEASUREMENTS

TEMPERATURE (°C)	19.8
DO (mg/L)	5.99
DO (%S)	80.30
CONDUCTIVITY (µS/cm)	45748.0
pH (pH units)	7.93
REDOX (mV)	16.3
TDS (mg/L)	32970.00

HYDROLOGICAL DATA

FLOW MEASUREMENT	Slight, 0.1 m/s
CROSS SECTION WIDTH (m)	15
DEPTH (m)	<1
OTHER	

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0020_SW027_251020				
0020_SD002_251020				

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:	0020_SW029		
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	SEDIMENT ID:	0020_SD004		
CLIENT:	Department of Defence	DATE:	20/10/2025	TIME:	8:40:00 AM
BASE / CATCHMENT:	0020 / Flatrock Creek	LOGGED BY:	ES / AK		
COORDINATES/GPS (if applicable)	290438.3, 6110792.31, see Figure 4B.				
SAMPLING METHOD (ie grab, bucket; if dry leave blank)	SURFACE WATER:	Grab	SEDIMENT:	Grab	

DETAILED SAMPLE LOCATION DESCRIPTION	On northern side of creek, climbed down slope at usual sampling location.

ENVIRONMENTAL OBSERVATIONS

WEATHER	Overcast
VEGETATION	Dense shrubs, trees, bush scrub
SLOPE	Steep on northern side, flat on southern side
EROSION	None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Pale yellow-orange tinge, clear, no odour or sheen.
SEDIMENT (describe as soil)	SAND, medium to coarse, pale grey, saturated, no odour or staining

FIELD MEASUREMENTS

TEMPERATURE (°C)	19.3
DO (mg/L)	4.92
DO (%S)	63.90
CONDUCTIVITY (µS/cm)	43000.0
pH (pH units)	7.87
REDOX (mV)	98.0
TDS (mg/L)	32604.00

HYDROLOGICAL DATA

FLOW MEASUREMENT	Slight, easterly direction, approximately 0.05 m/s
CROSS SECTION WIDTH (m)	15
DEPTH (m)	<1
OTHER	

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0020_SW029_251020				
0020_SD004_251020				

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:	0020_SW030		
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	SEDIMENT ID:			
CLIENT:	Department of Defence	DATE:	22/10/2025	TIME:	8:10:00 AM
BASE / CATCHMENT:	0020 / Flatrock Creek	LOGGED BY:	AD/AK		
COORDINATES/GPS (if applicable)	289697.86, 6109773.99, see Figure 4B.				
SAMPLING METHOD (ie grab, bucket; if dry leave blank)	SURFACE WATER:	Grab	SEDIMENT:		

DETAILED SAMPLE LOCATION DESCRIPTION ~10m upstream of culvert

ENVIRONMENTAL OBSERVATIONS

WEATHER	Overcast
VEGETATION	Shrubs and trees alongside channel
SLOPE	Gentle
EROSION	None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Pale orange tinge, clear, no odour, no sheen
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	15.8
DO (mg/L)	9.73
DO (%S)	98.60
CONDUCTIVITY (µS/cm)	142.6
pH (pH units)	4.53
REDOX (mV)	283.2
TDS (mg/L)	112.45

HYDROLOGICAL DATA

FLOW MEASUREMENT	~0.05m/s
CROSS SECTION WIDTH (m)	<1.5
DEPTH (m)	<0.2
OTHER	

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0020_SW030_251022				Yes

OTHER COMMENTS FOR CONSIDERATION

(e.g. health and safety, access issues, change in location, general observation, notes for future):	2x Lab QC collected



SURFACE WATER AND SEDIMENT SAMPLING RECORD

PROJECT NO.:	12626622	SURFACE WATER ID:	0020_SW033		
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	SEDIMENT ID:			
CLIENT:	Department of Defence	DATE:	20/10/2025	TIME:	10:24:00 AM
BASE / CATCHMENT:	0020 / Flatrock Creek	LOGGED BY:	ES / AK		
COORDINATES/GPS (if applicable)	290794.33, 6110816.42, see Figure 4B.				
SAMPLING METHOD (ie grab, bucket; if dry leave blank)	SURFACE WATER:	Pole	SEDIMENT:		

DETAILED SAMPLE LOCATION DESCRIPTION	Edge of rocks at end of Flatrock Creek, approximately 50m from bridge

ENVIRONMENTAL OBSERVATIONS

WEATHER	Overcast
VEGETATION	None. Some algae on rocks
SLOPE	Steel on southern side (Base), flat on northern side (Beach)
EROSION	None

DESCRIPTIONS

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

FIELD MEASUREMENTS

TEMPERATURE (°C)	20.4
DO (mg/L)	3.85
DO (%S)	53.10
CONDUCTIVITY (µS/cm)	51726.0
pH (pH units)	8.21
REDOX (mV)	27.7
TDS (mg/L)	36848.00

HYDROLOGICAL DATA

FLOW MEASUREMENT	Slight, affected by waves from beach.
CROSS SECTION WIDTH (m)	5
DEPTH (m)	1
OTHER	Low tide

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0020_SW033_251020				

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:	0020_SW037		
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	SEDIMENT ID:			
CLIENT:	Department of Defence	DATE:	20/10/2025	TIME:	8:32:00 AM
BASE / CATCHMENT:	0020 / Sewerage Treatment Plant	LOGGED BY:	AD/LR		
COORDINATES/GPS (if applicable)	291297.2, 6110362.77, see Figure 4B.				
SAMPLING METHOD (ie grab, bucket; if dry leave blank)	SURFACE WATER: Grab SEDIMENT:				

DETAILED SAMPLE LOCATION DESCRIPTION Collected from treatment pond

ENVIRONMENTAL OBSERVATIONS

WEATHER	Overcast
VEGETATION	NA
SLOPE	NA
EROSION	NA

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Pale yellow tinge, clear, no odour, no sheen, some suspended micro organisms
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	22.0
DO (mg/L)	4.50
DO (%S)	50.50
CONDUCTIVITY (µS/cm)	668.0
pH (pH units)	5.62
REDOX (mV)	60.8
TDS (mg/L)	461.50

HYDROLOGICAL DATA

FLOW MEASUREMENT	NA
CROSS SECTION WIDTH (m)	~50x20
DEPTH (m)	>1
OTHER	

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0020_SW037_251020	QC100, QC200	0020_QC100_251020	0020_QC200_251020	No

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: 0020_SW054
PROJECT NAME: JBRF and HMAS Creswell PFAS OMP SEDIMENT ID:
CLIENT: Department of Defence DATE: 20/10/2025 TIME: 1:11:00 PM
BASE / CATCHMENT: 0020 / Flatrock Creek LOGGED BY: AK

COORDINATES/GPS (if applicable) 290607.55, 6110434.4, see Figure 4B.
SAMPLING METHOD (ie grab, bucket; if dry leave blank) SURFACE WATER: Grab by hand SEDIMENT:

DETAILED SAMPLE LOCATION DESCRIPTION Culvert outflow from under road

ENVIRONMENTAL OBSERVATIONS

WEATHER Warm, overcast
VEGETATION Grass, algal mat on water surface
SLOPE moderate
EROSION none visible

DESCRIPTIONS

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

FIELD MEASUREMENTS

TEMPERATURE (°C) 24.9
DO (mg/L) 4.10
DO (%S) 49.70
CONDUCTIVITY (µS/cm) 961.0
pH (pH units) 5.74
REDOX (mV) -14.3
TDS (mg/L) 626.00

HYDROLOGICAL DATA

FLOW MEASUREMENT Stagnant, no flow
CROSS SECTION WIDTH (m) 2
DEPTH (m) 0.3
OTHER

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0020_SW054_251020				Yes

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:	0020_SW057
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	SEDIMENT ID:	
CLIENT:	Department of Defence	DATE:	20/10/2025 TIME: 8:59:00 AM
BASE / CATCHMENT:	0020 / Captains Lagoon	LOGGED BY:	LR
COORDINATES/GPS (if applicable)	291251.46, 6110255.21, see Figure 4B.		
SAMPLING METHOD (ie grab, bucket; if dry leave blank)	SURFACE WATER:	Grab	SEDIMENT:

DETAILED SAMPLE LOCATION DESCRIPTION	Pool beneath culvert outflow

ENVIRONMENTAL OBSERVATIONS

WEATHER	Overcast
VEGETATION	Ferns and tussocks line banks of drainage line
SLOPE	Low
EROSION	Moderate. Exposed soil evident on banks

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Clear, tannin brown colour, no odour or sheen, some white foam accumulated on surface of pool.
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	16.4
DO (mg/L)	5.47
DO (%S)	56.10
CONDUCTIVITY (µS/cm)	175.5
pH (pH units)	5.41
REDOX (mV)	-13.6
TDS (mg/L)	136.50

HYDROLOGICAL DATA

FLOW MEASUREMENT	Steady moderate flow out of culvert
CROSS SECTION WIDTH (m)	0.5
DEPTH (m)	0.3
OTHER	

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0020_SW057_251020	QC160, QC260	0020_QC160_251020	0020_QC260_251020	No

OTHER COMMENTS FOR CONSIDERATION

(e.g. health and safety, access issues, change in location, general observation, notes for future):	Deadwood in tree above sample location. Be careful during windy weather.



SURFACE WATER AND SEDIMENT SAMPLING RECORD

PROJECT NO.: 12626622 SURFACE WATER ID: _____
PROJECT NAME: JBRF and HMAS Creswell PFAS OMP SEDIMENT ID: 0021_SD011
CLIENT: Department of Defence DATE: 22/10/2025 TIME: 11:35:00 AM
BASE / CATCHMENT: 0021 / Captains Lagoon LOGGED BY: ES
COORDINATES/GPS (if applicable) 291134.2, 6107649, see Figure 4A.
SAMPLING METHOD (ie grab, bucket; if dry leave blank) SURFACE WATER: _____ SEDIMENT: Grab

DETAILED SAMPLE LOCATION DESCRIPTION Culvert on western side of ring road

ENVIRONMENTAL OBSERVATIONS

WEATHER Overcast
VEGETATION Grass surrounding sampling location
SLOPE Relatively flat
EROSION No

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen) _____
SEDIMENT (describe as soil) Gravelly SAND, fine to medium, pale brown, dry, no odour or staining, gravel; fine to medium, subangular

FIELD MEASUREMENTS

TEMPERATURE (°C) 26.1
DO (mg/L) 3.77
DO (%S) 45.40
CONDUCTIVITY (µS/cm) 209.0
pH (pH units) 5.98
REDOX (mV) 36.5
TDS (mg/L) 133.10

HYDROLOGICAL DATA

FLOW MEASUREMENT Culvert is dry
CROSS SECTION WIDTH (m) _____
DEPTH (m) _____
OTHER _____

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0021_SD011_251022				

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: 0021_SW001
PROJECT NAME: JBRF and HMAS Creswell PFAS OMP SEDIMENT ID:
CLIENT: Department of Defence DATE: 23/10/2025 TIME: 10:00:00 AM
BASE / CATCHMENT: 0021 / Captains Lagoon LOGGED BY: LR

COORDINATES/GPS (if applicable) 290683.95, 6107696.48, see Figure 4A. TDS

SAMPLING METHOD (ie grab, bucket; if dry leave blank) SURFACE WATER: SEDIMENT:

DETAILED SAMPLE LOCATION DESCRIPTION Swale to the side of road as exiting the SSSS fence. Recent drainage works and riprap lining the swale. DRY. No Sed collected

ENVIRONMENTAL OBSERVATIONS

WEATHER Sunny
VEGETATION None
SLOPE low
EROSION recent drainage works

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen) DRY
SEDIMENT (describe as soil)

FIELD MEASUREMENTS

TEMPERATURE (°C)
DO (mg/L)
DO (%S)
CONDUCTIVITY (µS/cm)
pH (pH units)
REDOX (mV)
TDS (mg/L)

HYDROLOGICAL DATA

FLOW MEASUREMENT
CROSS SECTION WIDTH (m)
DEPTH (m)
OTHER

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?

OTHER COMMENTS FOR CONSIDERATION

(e.g. health and safety, access issues, change in location, general observation, notes for future): Drainage works occurred at this location on 22/10/2025. Riprap now lines the entire swale. Sediment no longer available. DRY.



SURFACE WATER AND SEDIMENT SAMPLING RECORD

PROJECT NO.:	12626622	SURFACE WATER ID:	0021_SW002		
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	SEDIMENT ID:			
CLIENT:	Department of Defence	DATE:	22/10/2025	TIME:	9:49:00 AM
BASE / CATCHMENT:	0021 / Mary Creek	LOGGED BY:	LR		
COORDINATES/GPS (if applicable)	290621.53, 6107560.2, see Figure 4A.				
SAMPLING METHOD (ie grab, bucket; if dry leave blank)	SURFACE WATER: Grab SEDIMENT:				

DETAILED SAMPLE LOCATION DESCRIPTION Small shallow channel, muddy base and banks

ENVIRONMENTAL OBSERVATIONS

WEATHER	Sunny, windy
VEGETATION	thick native veg
SLOPE	low
EROSION	none evident

DESCRIPTIONS

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

FIELD MEASUREMENTS

TEMPERATURE (°C)	17.0
DO (mg/L)	1.10
DO (%S)	11.50
CONDUCTIVITY (µS/cm)	404.0
pH (pH units)	5.90
REDOX (mV)	-100.1
TDS (mg/L)	306.15

HYDROLOGICAL DATA

FLOW MEASUREMENT	None visible
CROSS SECTION WIDTH (m)	1
DEPTH (m)	0.05
OTHER	

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0021_SW002_251022				No

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: 0021_SW003
PROJECT NAME: JBRF and HMAS Creswell PFAS OMP SEDIMENT ID:
CLIENT: Department of Defence DATE: 22/10/2025 TIME: 8:35:00 AM
BASE / CATCHMENT: 0021 / Mary Creek LOGGED BY: LR

COORDINATES/GPS (if applicable) 290662.01, 6107483.79, see Figure 4A. TDS

SAMPLING METHOD (ie grab, bucket; if dry leave blank) SURFACE WATER: SEDIMENT:

DETAILED SAMPLE LOCATION DESCRIPTION Along alignment of recent drainage works. Exposed soil at surface. No standing water located in the vicinity (dry).

ENVIRONMENTAL OBSERVATIONS

WEATHER Windy, overcast
VEGETATION None
SLOPE Low
EROSION Highly disturbed area due to recent drainage works.

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen) DRY
SEDIMENT (describe as soil)

FIELD MEASUREMENTS

TEMPERATURE (°C)
DO (mg/L)
DO (%S)
CONDUCTIVITY (µS/cm)
pH (pH units)
REDOX (mV)
TDS (mg/L)

HYDROLOGICAL DATA

FLOW MEASUREMENT
CROSS SECTION WIDTH (m)
DEPTH (m)
OTHER

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
	QC163, QC263	#N/A		No

OTHER COMMENTS FOR CONSIDERATION

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



SURFACE WATER AND SEDIMENT SAMPLING RECORD

PROJECT NO.:	12626622	SURFACE WATER ID:	0021_SW004
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	SEDIMENT ID:	
CLIENT:	Department of Defence	DATE:	21/10/2025 TIME: 3:30:00 PM
BASE / CATCHMENT:	0021 / Mary Creek	LOGGED BY:	AK
COORDINATES/GPS (if applicable)	290426.13, 6107306.54, see Figure 4A.		
SAMPLING METHOD (ie grab, bucket; if dry leave blank)	SURFACE WATER:	SEDIMENT:	

DETAILED SAMPLE LOCATION DESCRIPTION

ENVIRONMENTAL OBSERVATIONS

WEATHER	Overcast
VEGETATION	Grass and gravel
SLOPE	None
EROSION	None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Dry
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	
DO (mg/L)	
DO (%S)	
CONDUCTIVITY (µS/cm)	
pH (pH units)	
REDOX (mV)	
TDS (mg/L)	

HYDROLOGICAL DATA

FLOW MEASUREMENT	Dry
CROSS SECTION WIDTH (m)	
DEPTH (m)	
OTHER	

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?

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: 0021_SW011
PROJECT NAME: JBRF and HMAS Creswell PFAS OMP SEDIMENT ID:
CLIENT: Department of Defence DATE: 23/10/2025 TIME: 2:50:00 PM
BASE / CATCHMENT: 0021 / Mary Creek LOGGED BY: AK

COORDINATES/GPS (if applicable) 290331.58, 6107210.14, see Figure 4A.

SAMPLING METHOD SURFACE WATER: SEDIMENT:
(ie grab, bucket; if dry leave blank)

DETAILED SAMPLE LOCATION DESCRIPTION Surface water channel relined with rip rap as part of remediation works, DRY.

ENVIRONMENTAL OBSERVATIONS

WEATHER Fine, windy
VEGETATION None
SLOPE None
EROSION None

DESCRIPTIONS

SURFACE WATER
(colour, turbidity, odour, sheen) DRY, swale drain construction
SEDIMENT
(describe as soil)

FIELD MEASUREMENTS

TEMPERATURE (°C)
DO (mg/L)
DO (%S)
CONDUCTIVITY (µS/cm)
pH (pH units)
REDOX (mV)
TDS (mg/L)

HYDROLOGICAL DATA

FLOW MEASUREMENT DRY
CROSS SECTION WIDTH (m)
DEPTH (m)
OTHER

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?

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:	0021_SW013		
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	SEDIMENT ID:	0021_SD009		
CLIENT:	Department of Defence	DATE:	23/10/2025	TIME:	12:00:00 PM
BASE / CATCHMENT:	0021 / Captains Lagoon	LOGGED BY:	ES		
COORDINATES/GPS (if applicable)	290873.11, 6108648.01, see Figure 4A.				
SAMPLING METHOD (ie grab, bucket; if dry leave blank)	SURFACE WATER:		SEDIMENT: Grab		

DETAILED SAMPLE LOCATION DESCRIPTION See comment. On GPS location but not where this sample has previously been collected from.

ENVIRONMENTAL OBSERVATIONS

WEATHER	Sunny
VEGETATION	Grass, some low shrubs on wall
SLOPE	Steep at side wall where water would flow from
EROSION	Possibly, no water at location but is clear where it would be based on channel in road.

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	DRY.
SEDIMENT (describe as soil)	SAND, medium to coarse, with fine gravel, dry, no odour or staining.

FIELD MEASUREMENTS

TEMPERATURE (°C)	
DO (mg/L)	
DO (%S)	
CONDUCTIVITY (µS/cm)	
pH (pH units)	
REDOX (mV)	
TDS (mg/L)	

HYDROLOGICAL DATA

FLOW MEASUREMENT	
CROSS SECTION WIDTH (m)	
DEPTH (m)	>1
OTHER	

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0021_SD009_251023				

OTHER COMMENTS FOR CONSIDERATION (e.g. health and safety, access issues, change in location, general observation, notes for future):	With field maps, have identified that 0021_SW013 and 0021_SD009 have erroneously been sampled in Oct 2024 and April 2025 at the location of 0021_SW172 (a culvert drain). 0021_SW013 is not a drain and rather a ephemeral water flow over land, see photos.



SURFACE WATER AND SEDIMENT SAMPLING RECORD

PROJECT NO.:	12626622	SURFACE WATER ID:	0021_SW017
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	SEDIMENT ID:	
CLIENT:	Department of Defence	DATE:	21/10/2025 TIME: 3:49:00 PM
BASE / CATCHMENT:	0021 / Mary Creek	LOGGED BY:	AK
COORDINATES/GPS (if applicable)	290419.84, 6107632.75, see Figure 4A. TDS		
SAMPLING METHOD (ie grab, bucket; if dry leave blank)	SURFACE WATER:	SEDIMENT:	

DETAILED SAMPLE LOCATION DESCRIPTION	Creek line beside runway, sandy

ENVIRONMENTAL OBSERVATIONS

WEATHER	Overcast
VEGETATION	Grass
SLOPE	None
EROSION	None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Dry
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	
DO (mg/L)	
DO (%S)	
CONDUCTIVITY (µS/cm)	
pH (pH units)	
REDOX (mV)	
TDS (mg/L)	

HYDROLOGICAL DATA

FLOW MEASUREMENT	Dry
CROSS SECTION WIDTH (m)	
DEPTH (m)	
OTHER	

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?

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:	0021_SW019		
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	SEDIMENT ID:			
CLIENT:	Department of Defence	DATE:	23/10/2025	TIME:	9:09:00 AM
BASE / CATCHMENT:	0021 / Captains Lagoon	LOGGED BY:	LR		
COORDINATES/GPS (if applicable)	290590.23, 6107975.27, see Figure 4A.				
SAMPLING METHOD (ie grab, bucket; if dry leave blank)	SURFACE WATER:		SEDIMENT:		

DETAILED SAMPLE LOCATION DESCRIPTION	Swale off the side of track. DRY

ENVIRONMENTAL OBSERVATIONS

WEATHER	Sunny
VEGETATION	
SLOPE	Low
EROSION	Erosion evident along the track and sides of road.

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	DRY
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	
DO (mg/L)	
DO (%S)	
CONDUCTIVITY (µS/cm)	
pH (pH units)	
REDOX (mV)	
TDS (mg/L)	

HYDROLOGICAL DATA

FLOW MEASUREMENT	
CROSS SECTION WIDTH (m)	
DEPTH (m)	
OTHER	

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?

OTHER COMMENTS FOR CONSIDERATION

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



SURFACE WATER AND SEDIMENT SAMPLING RECORD

PROJECT NO.: 12626622 SURFACE WATER ID: 0021_SW020
PROJECT NAME: JBRF and HMAS Creswell PFAS OMP SEDIMENT ID:
CLIENT: Department of Defence DATE: 21/10/2025 TIME: 4:05:00 PM
BASE / CATCHMENT: 0021 / Flatrock Creek LOGGED BY: AK

COORDINATES/GPS (if applicable) 290288.47, 6108274.91, see Figure 4A.

SAMPLING METHOD (ie grab, bucket; if dry leave blank) SURFACE WATER: SEDIMENT:

DETAILED SAMPLE LOCATION DESCRIPTION Gully

ENVIRONMENTAL OBSERVATIONS

WEATHER Overcast
VEGETATION Reeds, ferns, grass
SLOPE Slight
EROSION None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen) Dry
SEDIMENT (describe as soil)

FIELD MEASUREMENTS

TEMPERATURE (°C)
DO (mg/L)
DO (%S)
CONDUCTIVITY (µS/cm)
pH (pH units)
REDOX (mV)
TDS (mg/L)

HYDROLOGICAL DATA

FLOW MEASUREMENT Dry
CROSS SECTION WIDTH (m)
DEPTH (m)
OTHER

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?

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:	0021_SW021
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	SEDIMENT ID:	
CLIENT:	Department of Defence	DATE:	21/10/2025 TIME: 3:38:00 PM
BASE / CATCHMENT:	0021 / Captains Lagoon	LOGGED BY:	AK
COORDINATES/GPS (if applicable)	290578.19, 6108252.42, see Figure 4A.		
SAMPLING METHOD (ie grab, bucket; if dry leave blank)	SURFACE WATER:	SEDIMENT:	

DETAILED SAMPLE LOCATION DESCRIPTION

ENVIRONMENTAL OBSERVATIONS

WEATHER	Overcast
VEGETATION	Grass
SLOPE	Slight
EROSION	None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Dry
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	
DO (mg/L)	
DO (%S)	
CONDUCTIVITY (µS/cm)	
pH (pH units)	
REDOX (mV)	
TDS (mg/L)	

HYDROLOGICAL DATA

FLOW MEASUREMENT	Dry
CROSS SECTION WIDTH (m)	
DEPTH (m)	
OTHER	

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?

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: 0021_SW022
PROJECT NAME: JBRF and HMAS Creswell PFAS OMP SEDIMENT ID: 0021_SD018
CLIENT: Department of Defence DATE: 22/10/2025 TIME: 10:50:00 AM
BASE / CATCHMENT: 0021 / Flatrock Creek LOGGED BY: ES

COORDINATES/GPS (if applicable) 289828.77, 6108977.95, see Figure 4A.

SAMPLING METHOD (ie grab, bucket; if dry leave blank) SURFACE WATER: Grab SEDIMENT: Grab

DETAILED SAMPLE LOCATION DESCRIPTION GPS location not accessible, sampled as per previous rounds at 289820.0, 6108968.7 in SW pooling in access track through gate off ring road.

ENVIRONMENTAL OBSERVATIONS

WEATHER Sunny
VEGETATION Grass surrounding sampling location, with bush scrub and reeds in general area.
SLOPE Relatively flat, slight downhill slope from other side of fence
EROSION No

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen) Brown, clear, no odour, brittle (organic) sheen.
SEDIMENT (describe as soil) SILT, dark brown, with organics (grass and small sticks), saturated, no odour or staining.

FIELD MEASUREMENTS

TEMPERATURE (°C) 26.1
DO (mg/L) 3.77
DO (%S) 45.40
CONDUCTIVITY (µS/cm) 209.0
pH (pH units) 5.98
REDOX (mV) 36.5
TDS (mg/L) 133.10

HYDROLOGICAL DATA

FLOW MEASUREMENT No flow, pond in vehicle tracks
CROSS SECTION WIDTH (m) 0.5
DEPTH (m) ~ 0.05
OTHER

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0021_SW022_251022				
0021_SD018_251022	QC126, QC226	0021_QC126_251022	0021_QC226_251022	

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: 0021_SW025
PROJECT NAME: JBRF and HMAS Creswell PFAS OMP SEDIMENT ID: 0021_SD021
CLIENT: Department of Defence DATE: 21/10/2025 TIME: 4:54:00 PM
BASE / CATCHMENT: 0021 / Flatrock Creek LOGGED BY: LR

COORDINATES/GPS (if applicable) 289581.99, 6108602.42, see Figure 4A.

SAMPLING METHOD (ie grab, bucket; if dry leave blank) SURFACE WATER: SEDIMENT: Grab

DETAILED SAMPLE LOCATION DESCRIPTION Muddy creek bed, no water, thick bush

ENVIRONMENTAL OBSERVATIONS

WEATHER Overcast
VEGETATION Dense bush
SLOPE Low
EROSION None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen) DRY.
SEDIMENT (describe as soil) Silty CLAY, low plasticity, dark brown, some organics

FIELD MEASUREMENTS

TEMPERATURE (°C)
DO (mg/L)
DO (%S)
CONDUCTIVITY (µS/cm)
pH (pH units)
REDOX (mV)
TDS (mg/L)

HYDROLOGICAL DATA

FLOW MEASUREMENT
CROSS SECTION WIDTH (m)
DEPTH (m)
OTHER

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0021_SD021_251021				

OTHER COMMENTS FOR CONSIDERATION

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



SURFACE WATER AND SEDIMENT SAMPLING RECORD

PROJECT NO.: 12626622 SURFACE WATER ID: 0021_SW027
PROJECT NAME: JBRF and HMAS Creswell PFAS OMP SEDIMENT ID:
CLIENT: Department of Defence DATE: 22/10/2025 TIME: 1:00:00 PM
BASE / CATCHMENT: 0021 / Captains Lagoon LOGGED BY: ES
COORDINATES/GPS (if applicable) 290576.62, 6108832.99, see Figure 4A.
SAMPLING METHOD
(ie grab, bucket; if dry leave blank) SURFACE WATER: SEDIMENT:

DETAILED SAMPLE LOCATION DESCRIPTION Channel in bush scrubs. No surface water to sample.

ENVIRONMENTAL OBSERVATIONS

WEATHER
VEGETATION
SLOPE
EROSION

DESCRIPTIONS

SURFACE WATER
(colour, turbidity, odour, sheen) DRY.
SEDIMENT
(describe as soil)

FIELD MEASUREMENTS

TEMPERATURE (°C)
DO (mg/L)
DO (%S)
CONDUCTIVITY (µS/cm)
pH (pH units)
REDOX (mV)
TDS (mg/L)

HYDROLOGICAL DATA

FLOW MEASUREMENT
CROSS SECTION WIDTH (m)
DEPTH (m)
OTHER

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?

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:	0021_SW032		
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	SEDIMENT ID:			
CLIENT:	Department of Defence	DATE:	22/10/2025	TIME:	8:48:00 AM
BASE / CATCHMENT:	0021 / Lakes	LOGGED BY:	AD/AK		
COORDINATES/GPS (if applicable)	287669.77, 6108446.98, see Figure 4D.				
SAMPLING METHOD (ie grab, bucket; if dry leave blank)	SURFACE WATER: Grab SEDIMENT:				

DETAILED SAMPLE LOCATION DESCRIPTION	Edge of Lake near coords

ENVIRONMENTAL OBSERVATIONS

WEATHER	Overcast
VEGETATION	Trees and grasses in and surrounding the lake
SLOPE	Gentle to flat
EROSION	None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Pale yellow tinge, clear, faint organic odour, no sheen
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	21.0
DO (mg/L)	6.14
DO (%S)	71.40
CONDUCTIVITY (µS/cm)	180.4
pH (pH units)	5.65
REDOX (mV)	269.0
TDS (mg/L)	127.40

HYDROLOGICAL DATA

FLOW MEASUREMENT	Stagnant, lake
CROSS SECTION WIDTH (m)	NA, Lake
DEPTH (m)	<0.5
OTHER	

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0021_SW032_251022				No

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:	0021_SW034		
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	SEDIMENT ID:			
CLIENT:	Department of Defence	DATE:	22/10/2025	TIME:	9:08:00 AM
BASE / CATCHMENT:	0021 / Lakes	LOGGED BY:	AD/AK		
COORDINATES/GPS (if applicable)	288081.2, 6108114.26, see Figure 4D.				
SAMPLING METHOD (ie grab, bucket; if dry leave blank)	SURFACE WATER:	Grab	SEDIMENT:		

DETAILED SAMPLE LOCATION DESCRIPTION	Edge of Lake near coords

ENVIRONMENTAL OBSERVATIONS

WEATHER	Overcast
VEGETATION	Trees and grasses in and surrounding the lake
SLOPE	Gentle to flat
EROSION	None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Pale yellow tinge, clear, faint organic odour, no sheen
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	20.2
DO (mg/L)	5.27
DO (%S)	57.70
CONDUCTIVITY (µS/cm)	186.5
pH (pH units)	5.48
REDOX (mV)	248.6
TDS (mg/L)	133.25

HYDROLOGICAL DATA

FLOW MEASUREMENT	Stagnant, lake
CROSS SECTION WIDTH (m)	NA, Lake
DEPTH (m)	<0.5
OTHER	

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0021_SW034_251022				No

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: 0021_SW037
PROJECT NAME: JBRF and HMAS Creswell PFAS OMP SEDIMENT ID:
CLIENT: Department of Defence DATE: 21/10/2025 TIME: 1:56:00 PM
BASE / CATCHMENT: 0021 / Lakes LOGGED BY: LR

COORDINATES/GPS (if applicable) 287861.99, 6108927.06, see Figure 4D.

SAMPLING METHOD (ie grab, bucket; if dry leave blank) SURFACE WATER: Grab SEDIMENT:

DETAILED SAMPLE LOCATION DESCRIPTION Where track meets the lake.

ENVIRONMENTAL OBSERVATIONS

WEATHER Overcast
VEGETATION Dead trees within lake
SLOPE Flat
EROSION None evident

DESCRIPTIONS

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

FIELD MEASUREMENTS

TEMPERATURE (°C) 21.3
DO (mg/L) 6.35
DO (%S) 71.00
CONDUCTIVITY (µS/cm) 109.5
pH (pH units) 5.92
REDOX (mV) -79.6
TDS (mg/L) 76.70

HYDROLOGICAL DATA

FLOW MEASUREMENT N/A
CROSS SECTION WIDTH (m) Lake
DEPTH (m) >1
OTHER

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0021_SW037_251021				No

OTHER COMMENTS FOR CONSIDERATION

(e.g. health and safety, access issues, change in location, general observation, notes for future): Water level within the lake is quite high. Area we would usually park is under water.



SURFACE WATER AND SEDIMENT SAMPLING RECORD

PROJECT NO.:	12626622	SURFACE WATER ID:	0021_SW040
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	SEDIMENT ID:	
CLIENT:	Department of Defence	DATE:	21/10/2025 TIME: 2:23:00 PM
BASE / CATCHMENT:	0021 / Lakes	LOGGED BY:	LR
COORDINATES/GPS (if applicable)	288389.42, 6109072.68, see Figure 4D.		
SAMPLING METHOD (ie grab, bucket; if dry leave blank)	SURFACE WATER:	Grab	SEDIMENT:

DETAILED SAMPLE LOCATION DESCRIPTION From within lake. Flooded trees and vegetation.

ENVIRONMENTAL OBSERVATIONS

WEATHER	Overcast
VEGETATION	Native veg within lake and surrounding it
SLOPE	Flat
EROSION	None

DESCRIPTIONS

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

FIELD MEASUREMENTS

TEMPERATURE (°C)	21.1
DO (mg/L)	4.44
DO (%S)	49.90
CONDUCTIVITY (µS/cm)	111.4
pH (pH units)	5.95
REDOX (mV)	-82.9
TDS (mg/L)	78.00

HYDROLOGICAL DATA

FLOW MEASUREMENT	N/A
CROSS SECTION WIDTH (m)	Lake
DEPTH (m)	>1
OTHER	

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0021_SW040_251021				No

OTHER COMMENTS FOR CONSIDERATION

(e.g. health and safety, access issues, change in location, general observation, notes for future): Access track is eroded and in poor condition towards SW040, walk if not confident with 4wd.



SURFACE WATER AND SEDIMENT SAMPLING RECORD

PROJECT NO.:	12626622	SURFACE WATER ID:	0021_SW043		
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	SEDIMENT ID:	0021_SD035		
CLIENT:	Department of Defence	DATE:	21/10/2025	TIME:	7:54:00 AM
BASE / CATCHMENT:	0021 / Mary Creek	LOGGED BY:	AD		
COORDINATES/GPS (if applicable)	289278.25, 6106253.36, See Figure 4C.				
SAMPLING METHOD (ie grab, bucket; if dry leave blank)	SURFACE WATER:	Grab	SEDIMENT:	Hand Auger	

DETAILED SAMPLE LOCATION DESCRIPTION	Right bank of channel, near pathway

ENVIRONMENTAL OBSERVATIONS

WEATHER	Overcast
VEGETATION	Reeds alongside channel
SLOPE	Gentle
EROSION	None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Clear, pale yellow tinge, no odour, no sheen
SEDIMENT (describe as soil)	SAND, fine to medium grain, angular to sub-angular, yellow-grey, organic odour, no sheen, with organic matter

FIELD MEASUREMENTS

TEMPERATURE (°C)	17.1
DO (mg/L)	2.42
DO (%S)	25.50
CONDUCTIVITY (µS/cm)	353.5
pH (pH units)	6.08
REDOX (mV)	77.7
TDS (mg/L)	270.40

HYDROLOGICAL DATA

FLOW MEASUREMENT	Stagnant
CROSS SECTION WIDTH (m)	<10
DEPTH (m)	<1
OTHER	

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0021_SW043_251021	QC102, QC202	0021_QC102_251021	0021_QC202_251021	No
0021_SD035_251021				

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:	0021_SW044		
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	SEDIMENT ID:	0021_SD036		
CLIENT:	Department of Defence	DATE:	21/10/2025	TIME:	9:14:00 AM
BASE / CATCHMENT:	0021 / Mary Creek	LOGGED BY:	AD		
COORDINATES/GPS (if applicable)	289463.14, 6106529.97, See Figure 4C.				
SAMPLING METHOD (ie grab, bucket; if dry leave blank)	SURFACE WATER:	Grab	SEDIMENT:	Hand Auger	

DETAILED SAMPLE LOCATION DESCRIPTION	Just downstream of rock water fall ledge

ENVIRONMENTAL OBSERVATIONS

WEATHER	Overcast
VEGETATION	Ferns, shrubs, and trees overhanging
SLOPE	Gentle
EROSION	None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Pale yellow tinge, clear, organic odour, no sheen, white filmy foam substance on surface
SEDIMENT (describe as soil)	Gravelly SAND, fine to coarse grain, angular to sub-angular, pale yellow-brown; gravel fine to coarse grained, angular to sub-angular; organic odour, no staining

FIELD MEASUREMENTS

TEMPERATURE (°C)	16.8
DO (mg/L)	5.82
DO (%S)	59.80
CONDUCTIVITY (µS/cm)	312.1
pH (pH units)	6.37
REDOX (mV)	98.6
TDS (mg/L)	239.20

HYDROLOGICAL DATA

FLOW MEASUREMENT	Stagnant
CROSS SECTION WIDTH (m)	<2
DEPTH (m)	<1
OTHER	

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0021_SW044_251021				No
0021_SD036_251021				

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:	0021_SW045		
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	SEDIMENT ID:	0021_SD037		
CLIENT:	Department of Defence	DATE:	21/10/2025	TIME:	9:59:00 AM
BASE / CATCHMENT:	0021 / Mary Creek	LOGGED BY:	AD		
COORDINATES/GPS (if applicable)	289636.38, 6106816.62, See Figure 4C.				
SAMPLING METHOD (ie grab, bucket; if dry leave blank)	SURFACE WATER:	Grab	SEDIMENT:	Grab	

DETAILED SAMPLE LOCATION DESCRIPTION	2m upstream of culvert

ENVIRONMENTAL OBSERVATIONS

WEATHER	Overcast
VEGETATION	Shrubs and trees overhanging
SLOPE	Gentle
EROSION	None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Yellow-brown tinge, clear, no odour, no sheen
SEDIMENT (describe as soil)	Sandy GRAVEL, fine to medium grained, angular to sub-angular, grey, yellow, and pale brown, no odour, no staining

FIELD MEASUREMENTS

TEMPERATURE (°C)	16.4
DO (mg/L)	6.16
DO (%S)	62.70
CONDUCTIVITY (µS/cm)	278.8
pH (pH units)	5.24
REDOX (mV)	181.2
TDS (mg/L)	216.45

HYDROLOGICAL DATA

FLOW MEASUREMENT	Stagnant
CROSS SECTION WIDTH (m)	<1
DEPTH (m)	<0.5
OTHER	

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0021_SW045_251021				Yes
0021_SD037_251021				

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:	0021_SW048		
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	SEDIMENT ID:	0021_SD040		
CLIENT:	Department of Defence	DATE:	21/10/2025	TIME:	4:27:00 PM
BASE / CATCHMENT:	0021 / Mary Creek	LOGGED BY:	LR		

COORDINATES/GPS (if applicable) 289870.79, 6107513.25, see Figure 4A.

SAMPLING METHOD (ie grab, bucket; if dry leave blank) SURFACE WATER: Grab SEDIMENT: Grab

DETAILED SAMPLE LOCATION DESCRIPTION Very small pool approx. 3m up stream of culvert inflow. Only water able to be located near SW048 coordinates

ENVIRONMENTAL OBSERVATIONS

WEATHER	Overcast
VEGETATION	Grasses
SLOPE	Low
EROSION	none

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen) Clear, pale brown tinge, no odour or sheen

SEDIMENT (describe as soil) silty SAND, fine, dark grey brown, with organics.

FIELD MEASUREMENTS

TEMPERATURE (°C)	17.9
DO (mg/L)	1.20
DO (%S)	12.60
CONDUCTIVITY (µS/cm)	281.0
pH (pH units)	5.12
REDOX (mV)	-148.3
TDS (mg/L)	211.25

HYDROLOGICAL DATA

FLOW MEASUREMENT	none
CROSS SECTION WIDTH (m)	0.15
DEPTH (m)	0.05
OTHER	

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0021_SW048_251021				
0021_SD040_251021				

OTHER COMMENTS FOR CONSIDERATION

(e.g. health and safety, access issues, change in location, general observation, notes for future): Sample collected using syringe due low water level.



SURFACE WATER AND SEDIMENT SAMPLING RECORD

PROJECT NO.:	12626622	SURFACE WATER ID:	0021_SW052		
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	SEDIMENT ID:	0021_SD044		
CLIENT:	Department of Defence	DATE:	21/10/2025	TIME:	8:21:00 AM
BASE / CATCHMENT:	0021 / Mary Creek	LOGGED BY:	AD		

COORDINATES/GPS (if applicable) 289306.16, 6105957.95, See Figure 4C.

SAMPLING METHOD (ie grab, bucket; if dry leave blank) SURFACE WATER: Grab SEDIMENT: Trowel

DETAILED SAMPLE LOCATION DESCRIPTION At tidal mixing zone

ENVIRONMENTAL OBSERVATIONS

WEATHER	Overcast
VEGETATION	None
SLOPE	Gentle
EROSION	None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen) Clear, no odour, no sheen, no sediment

SEDIMENT (describe as soil) SAND, fine grained, angular to sub-angular, yellow-grey, no odour, no staining

FIELD MEASUREMENTS

TEMPERATURE (°C)	17.4
DO (mg/L)	7.25
DO (%S)	83.70
CONDUCTIVITY (µS/cm)	20908.0
pH (pH units)	7.59
REDOX (mV)	113.3
TDS (mg/L)	12311.00

HYDROLOGICAL DATA

FLOW MEASUREMENT	Tidal, fluctuating
CROSS SECTION WIDTH (m)	<5
DEPTH (m)	<0.3
OTHER	

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0021_SW052_251021				Yes
0021_SD044_251021				

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:	0021_SW053		
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	SEDIMENT ID:			
CLIENT:	Department of Defence	DATE:	21/10/2025	TIME:	9:40:00 AM
BASE / CATCHMENT:	0021 / Mary Creek	LOGGED BY:	AD		
COORDINATES/GPS (if applicable)	289682.45, 6106772, See Figure 4C. TDS				
SAMPLING METHOD (ie grab, bucket; if dry leave blank)	SURFACE WATER:	Grab	SEDIMENT:		

DETAILED SAMPLE LOCATION DESCRIPTION	Upstream of road crossing

ENVIRONMENTAL OBSERVATIONS

WEATHER	Overcast
VEGETATION	Shrubs and trees alongside channel
SLOPE	Gentle, sharp drop downstream after road
EROSION	None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Yellow-brown tinge, clear, no odour, no sheen, no sediment
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	16.9
DO (mg/L)	2.01
DO (%S)	20.80
CONDUCTIVITY (µS/cm)	240.6
pH (pH units)	4.98
REDOX (mV)	172.5
TDS (mg/L)	184.60

HYDROLOGICAL DATA

FLOW MEASUREMENT	~0.01m/s
CROSS SECTION WIDTH (m)	<2
DEPTH (m)	<0.5
OTHER	

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0021_SW053_251021				Yes

OTHER COMMENTS FOR CONSIDERATION

(e.g. health and safety, access issues, change in location, general observation, notes for future):	Sediment sample collected downstream of road, unable to obtain sediment upstream



SURFACE WATER AND SEDIMENT SAMPLING RECORD

PROJECT NO.:	12626622	SURFACE WATER ID:	0021_SW056		
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	SEDIMENT ID:	0021_SD046		
CLIENT:	Department of Defence	DATE:	21/10/2025	TIME:	7:52:00 AM
BASE / CATCHMENT:	0021 / Summercloud Creek	LOGGED BY:	LR		
COORDINATES/GPS (if applicable)	289750.41, 6105765.93, See Figure 4C.				
SAMPLING METHOD (ie grab, bucket; if dry leave blank)	SURFACE WATER:	Grab	SEDIMENT:	Grab	

DETAILED SAMPLE LOCATION DESCRIPTION Steep vegetated back dunes leading down to Summercloud Creek

ENVIRONMENTAL OBSERVATIONS

WEATHER	Overcast
VEGETATION	Coastal dune vegetation
SLOPE	Very steep leading down to location
EROSION	Exposed sand on dunes

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Clear, tannin brown, no odour or sheen, non-turbid
SEDIMENT (describe as soil)	SAND, fine, pale grey, trace organics

FIELD MEASUREMENTS

TEMPERATURE (°C)	19.8
DO (mg/L)	4.15
DO (%S)	53.90
CONDUCTIVITY (µS/cm)	39766.0
pH (pH units)	7.52
REDOX (mV)	91.9
TDS (mg/L)	28645.50

HYDROLOGICAL DATA

FLOW MEASUREMENT	None visible, large water body
CROSS SECTION WIDTH (m)	20
DEPTH (m)	>1.0
OTHER	

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0021_SW056_251021				No
0021_SD046_251021				

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:	0021_SW057		
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	SEDIMENT ID:			
CLIENT:	Department of Defence	DATE:	21/10/2025	TIME:	9:57:00 AM
BASE / CATCHMENT:	0021 / Summercloud Creek	LOGGED BY:	LR		
COORDINATES/GPS (if applicable)	290122.79, 6105952.4, See Figure 4C.				
SAMPLING METHOD (ie grab, bucket; if dry leave blank)	SURFACE WATER: Grab SEDIMENT:				

DETAILED SAMPLE LOCATION DESCRIPTION	Creek running parallel to Boorala Rd, large logs have fallen across creek.

ENVIRONMENTAL OBSERVATIONS

WEATHER	Overcast
VEGETATION	dense native veg lines the creek bank
SLOPE	Low
EROSION	None evident

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Clear, tannin brown coloured, no odour or sheen, some pale foam accumulation surface, non-turbid
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	16.7
DO (mg/L)	4.50
DO (%S)	45.90
CONDUCTIVITY (µS/cm)	190.7
pH (pH units)	5.47
REDOX (mV)	-35.9
TDS (mg/L)	147.55

HYDROLOGICAL DATA

FLOW MEASUREMENT	Steady moderate flow
CROSS SECTION WIDTH (m)	5
DEPTH (m)	>0.5
OTHER	

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0021_SW057_251021				No

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:	0021_SW058		
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	SEDIMENT ID:			
CLIENT:	Department of Defence	DATE:	21/10/2025	TIME:	9:27:00 AM
BASE / CATCHMENT:	0021 / Summercloud Creek	LOGGED BY:	LR		
COORDINATES/GPS (if applicable)	290717.13, 6106624.81, See Figure 4C.				
SAMPLING METHOD (ie grab, bucket; if dry leave blank)	SURFACE WATER: Grab SEDIMENT:				

DETAILED SAMPLE LOCATION DESCRIPTION Overgrown powerline easement, where creek intersects. pool below step in creek

ENVIRONMENTAL OBSERVATIONS

WEATHER	Overcast
VEGETATION	Very thick dense native veg
SLOPE	steep into creek gully
EROSION	none

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Clear, slight yellow tinge, no odour or sheen
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	16.0
DO (mg/L)	4.66
DO (%S)	47.00
CONDUCTIVITY (µS/cm)	200.8
pH (pH units)	4.4
REDOX (mV)	-31.9
TDS (mg/L)	157.30

HYDROLOGICAL DATA

FLOW MEASUREMENT	Steady trickle
CROSS SECTION WIDTH (m)	0.3
DEPTH (m)	0.4
OTHER	

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0021_SW058_251021	QC161, QC261	0021_QC161_251021	0021_QC261_251021	No

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: 0021_SW068
PROJECT NAME: JBRF and HMAS Creswell PFAS OMP SEDIMENT ID:
CLIENT: Department of Defence DATE: 20/10/2025 TIME: 4:52:00 PM
BASE / CATCHMENT: 0021 / Telegraph Creek LOGGED BY: AD/LR

COORDINATES/GPS (if applicable) 292568.59, 6109413.15, see Figure 4E.
SAMPLING METHOD (ie grab, bucket; if dry leave blank) SURFACE WATER: Grab SEDIMENT:

DETAILED SAMPLE LOCATION DESCRIPTION Right bank near coordinates

ENVIRONMENTAL OBSERVATIONS

WEATHER Clear
VEGETATION Reeds along right bank
SLOPE Gentle
EROSION None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen) Clear, no odour, yellow-brown tinge, no sheen, no sediment
SEDIMENT (describe as soil)

FIELD MEASUREMENTS

TEMPERATURE (°C) 21.0
DO (mg/L) 4.20
DO (%S) 55.20
CONDUCTIVITY (µS/cm) 40726.0
pH (pH units) 7.48
REDOX (mV) -132.7
TDS (mg/L) 28704.00

HYDROLOGICAL DATA

FLOW MEASUREMENT ~0.01m/s
CROSS SECTION WIDTH (m) <10
DEPTH (m) <1
OTHER

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0021_SW068_251020				

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:	0021_SW076		
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	SEDIMENT ID:	0021_SD066		
CLIENT:	Department of Defence	DATE:	23/10/2025	TIME:	9:16:00 AM
BASE / CATCHMENT:	0021 / Clay Pools	LOGGED BY:	ES / AK		
COORDINATES/GPS (if applicable)	289512.61, 6107828.64, See Figure 4A.				
SAMPLING METHOD (ie grab, bucket; if dry leave blank)	SURFACE WATER:	Grab	SEDIMENT:	Hand auger	

DETAILED SAMPLE LOCATION DESCRIPTION Large pond, in bush scrub, most upgradient clay pool

ENVIRONMENTAL OBSERVATIONS

WEATHER	Slightly overcast, cool temperature
VEGETATION	Bush scrub, reeds in pond. Algal mat on water surface at edge.
SLOPE	Very slight
EROSION	None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Pale yellow, clear, no odour or sheen, trace algae.
SEDIMENT (describe as soil)	SILT/PEAT, dark brown, with organics, strong organic odour, no staining.

FIELD MEASUREMENTS

TEMPERATURE (°C)	18.0
DO (mg/L)	1.01
DO (%S)	10.50
CONDUCTIVITY (µS/cm)	194.2
pH (pH units)	5.41
REDOX (mV)	-43.6
TDS (mg/L)	145.90

HYDROLOGICAL DATA

FLOW MEASUREMENT	Not flowing, pond
CROSS SECTION WIDTH (m)	50
DEPTH (m)	<1
OTHER	

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0021_SW076_251023				
0021_SD066_251023				

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:	0021_SW077		
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	SEDIMENT ID:	0021_SD067		
CLIENT:	Department of Defence	DATE:	23/10/2025	TIME:	8:59:00 AM
BASE / CATCHMENT:	0021 / Clay Pools	LOGGED BY:	ES / AK		

COORDINATES/GPS (if applicable) 289412.16, 6107952.6, See Figure 4A.

SAMPLING METHOD (ie grab, bucket; if dry leave blank) SURFACE WATER: Grab SEDIMENT: Grab

DETAILED SAMPLE LOCATION DESCRIPTION Large pond, in bush scrub

ENVIRONMENTAL OBSERVATIONS

WEATHER	Slightly overcast, cool temperature
VEGETATION	Bush scrub, reeds in pond
SLOPE	Very slight
EROSION	None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Brown, slightly turbid, no odour or sheen
SEDIMENT (describe as soil)	Dark brown, silt/peat, with organics, strong organic odour, no staining

FIELD MEASUREMENTS

TEMPERATURE (°C)	16.9
DO (mg/L)	1.93
DO (%S)	19.70
CONDUCTIVITY (µS/cm)	241.4
pH (pH units)	5.25
REDOX (mV)	-127.9
TDS (mg/L)	185.60

HYDROLOGICAL DATA

FLOW MEASUREMENT	Not flowing,
CROSS SECTION WIDTH (m)	1
DEPTH (m)	>1
OTHER	

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0021_SW077_251023				
0021_SD067_251023				

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:	0021_SW078		
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	SEDIMENT ID:	0021_SD068		
CLIENT:	Department of Defence	DATE:	23/10/2025	TIME:	8:43:00 AM
BASE / CATCHMENT:	0021 / Clay Pools	LOGGED BY:	ES / AK		

COORDINATES/GPS (if applicable) 289388.88, 6108000.81, See Figure 4A.

SAMPLING METHOD (ie grab, bucket; if dry leave blank)	SURFACE WATER:	Grab	SEDIMENT:	Hand auger

DETAILED SAMPLE LOCATION DESCRIPTION Large pond, in bush scrub

ENVIRONMENTAL OBSERVATIONS

WEATHER	Slightly overcast, cool temperature
VEGETATION	Bush scrub, reeds in pond
SLOPE	Very slight
EROSION	None

DESCRIPTIONS

SURFACE WATER
(colour, turbidity, odour, sheen) Pale yellow, clear, no odour or sheen.

SEDIMENT
(describe as soil) Dark brown, silt, no plasticity, with organics, moderate organic odour, no staining

FIELD MEASUREMENTS

TEMPERATURE (°C)	19.1
DO (mg/L)	2.29
DO (%S)	24.90
CONDUCTIVITY (µS/cm)	188.2
pH (pH units)	5.72
REDOX (mV)	162.3
TDS (mg/L)	137.90

HYDROLOGICAL DATA

FLOW MEASUREMENT	Not flowing, pond
CROSS SECTION WIDTH (m)	40
DEPTH (m)	>1
OTHER	

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0021_SW078_251023				
0021_SD068_251023				

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:	0021_SW079		
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	SEDIMENT ID:	0021_SD069		
CLIENT:	Department of Defence	DATE:	23/10/2025	TIME:	8:04:00 AM
BASE / CATCHMENT:	0021 / Clay Pools	LOGGED BY:	ES / AK		
COORDINATES/GPS (if applicable)	289336.46, 6108064.48, See Figure 4A.				
SAMPLING METHOD (ie grab, bucket; if dry leave blank)	SURFACE WATER:	Grab	SEDIMENT:	Hand auger	

DETAILED SAMPLE LOCATION DESCRIPTION Large pond, in bush scrub, most upgradient clay pool

ENVIRONMENTAL OBSERVATIONS

WEATHER	Slightly overcast, cool temperature
VEGETATION	Bush scrub, reeds in pond
SLOPE	Moderate from bank
EROSION	None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Brown, slightly turbid, some suspended brown organics, no odour or sheen.
SEDIMENT (describe as soil)	CLAY, medium plasticity, pale grey-white, soft, wet, no odour or staining, some organic matter.

FIELD MEASUREMENTS

TEMPERATURE (°C)	15.0
DO (mg/L)	4.11
DO (%S)	41.40
CONDUCTIVITY (µS/cm)	159.1
pH (pH units)	5.40
REDOX (mV)	108.6
TDS (mg/L)	127.60

HYDROLOGICAL DATA

FLOW MEASUREMENT	Not flowing, pond
CROSS SECTION WIDTH (m)	40
DEPTH (m)	>1
OTHER	

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0021_SW079_251023				
0021_SD069_251023				

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:	0021_SW080		
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	SEDIMENT ID:			
CLIENT:	Department of Defence	DATE:	23/10/2025	TIME:	7:42:00 AM
BASE / CATCHMENT:	0021 / Clay Pools	LOGGED BY:	ES		
COORDINATES/GPS (if applicable)	289287.51, 6108105.39, See Figure 4A.				
SAMPLING METHOD (ie grab, bucket; if dry leave blank)	SURFACE WATER:	Grab	SEDIMENT:		

DETAILED SAMPLE LOCATION DESCRIPTION	Large pond, in bush scrub, most upgradient clay pool

ENVIRONMENTAL OBSERVATIONS

WEATHER	Slightly overcast, cool temperature
VEGETATION	Bush scrub, reeds in pond
SLOPE	Very slight
EROSION	None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Pale brown, clear, some suspended brown organics, no odour or sheen.
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	19.0
DO (mg/L)	4.00
DO (%S)	43.20
CONDUCTIVITY (µS/cm)	109.3
pH (pH units)	5.82
REDOX (mV)	171.7
TDS (mg/L)	80.10

HYDROLOGICAL DATA

FLOW MEASUREMENT	Not flowing, pond
CROSS SECTION WIDTH (m)	40
DEPTH (m)	>1
OTHER	

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0021_SW080_251023				

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: 0021_SW110
PROJECT NAME: JBRF and HMAS Creswell PFAS OMP SEDIMENT ID:
CLIENT: Department of Defence DATE: 23/10/2025 TIME: 12:23:00 PM
BASE / CATCHMENT: 0021 / Mary Creek LOGGED BY: AK

COORDINATES/GPS (if applicable) 290742.283, 6107645.754, see Figure 4A.

SAMPLING METHOD (ie grab, bucket; if dry leave blank) SURFACE WATER: SEDIMENT:

DETAILED SAMPLE LOCATION DESCRIPTION Previously culvert south-west of pits, destroyed

ENVIRONMENTAL OBSERVATIONS

WEATHER Fine, windy
VEGETATION None
SLOPE None
EROSION None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen) Culvert drain destroyed
SEDIMENT (describe as soil)

FIELD MEASUREMENTS

TEMPERATURE (°C)
DO (mg/L)
DO (%S)
CONDUCTIVITY (µS/cm)
pH (pH units)
REDOX (mV)
TDS (mg/L)

HYDROLOGICAL DATA

FLOW MEASUREMENT Culvert destroyed
CROSS SECTION WIDTH (m)
DEPTH (m)
OTHER

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?

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: 0021_SW127
PROJECT NAME: JBRF and HMAS Creswell PFAS OMP SEDIMENT ID:
CLIENT: Department of Defence DATE: 23/10/2025 TIME: 2:44:00 PM
BASE / CATCHMENT: 0021 / Mary Creek LOGGED BY: AK

COORDINATES/GPS (if applicable) 290148, 6107464, see Figure 4A.

SAMPLING METHOD (ie grab, bucket; if dry leave blank) SURFACE WATER: SEDIMENT:

DETAILED SAMPLE LOCATION DESCRIPTION Roadside ditch, currently EPS excavation/trench, location dry

ENVIRONMENTAL OBSERVATIONS

WEATHER Fine, windy
VEGETATION None
SLOPE None
EROSION None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen) Dry
SEDIMENT (describe as soil)

FIELD MEASUREMENTS

TEMPERATURE (°C)
DO (mg/L)
DO (%S)
CONDUCTIVITY (µS/cm)
pH (pH units)
REDOX (mV)
TDS (mg/L)

HYDROLOGICAL DATA

FLOW MEASUREMENT Dry
CROSS SECTION WIDTH (m)
DEPTH (m)
OTHER

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?

OTHER COMMENTS FOR CONSIDERATION

(e.g. health and safety, access issues, change in location, general observation, notes for future): Very shallow patches of standing water along western wall of trench, not enough for samples or parameters and inaccessible due to unstable banks



SURFACE WATER AND SEDIMENT SAMPLING RECORD

PROJECT NO.:	12626622	SURFACE WATER ID:	0021_SW153
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	SEDIMENT ID:	
CLIENT:	Department of Defence	DATE:	23/10/2025 TIME: 3:05:00 PM
BASE / CATCHMENT:	0021 / Mary Creek	LOGGED BY:	AK
COORDINATES/GPS (if applicable)	290246.73, 6107540.37, see Figure 4A. TDS		
SAMPLING METHOD (ie grab, bucket; if dry leave blank)	SURFACE WATER:	Grab	SEDIMENT:

DETAILED SAMPLE LOCATION DESCRIPTION Roadside ditch

ENVIRONMENTAL OBSERVATIONS

WEATHER Fine, windy

VEGETATION None

SLOPE None

EROSION None

DESCRIPTIONS

SURFACE WATER
(colour, turbidity, odour, sheen) Clear, slight orange-brown tinge, no odour or sheen

SEDIMENT
(describe as soil)

FIELD MEASUREMENTS

TEMPERATURE (°C) 26.7

DO (mg/L) 5.15

DO (%S) 66.80

CONDUCTIVITY (µS/cm) 1228.0

pH (pH units) 7.34

REDOX (mV) -14.9

TDS (mg/L) 746.00

HYDROLOGICAL DATA

FLOW MEASUREMENT None

CROSS SECTION WIDTH (m) 2

DEPTH (m) >0.5

OTHER

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0021_SW153_251023				Yes

OTHER COMMENTS FOR CONSIDERATION

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

125ml inorganic bottle collected for validation sampling



SURFACE WATER AND SEDIMENT SAMPLING RECORD

PROJECT NO.:	12626622	SURFACE WATER ID:	0021_SW188		
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	SEDIMENT ID:	0021_SD188		
CLIENT:	Department of Defence	DATE:	21/10/2025	TIME:	3:03:00 PM
BASE / CATCHMENT:	0021 / Summercloud Creek	LOGGED BY:	LR		
COORDINATES/GPS (if applicable)	289475.29, 6105751.77, See Figure 4C.				
SAMPLING METHOD (ie grab, bucket; if dry leave blank)	SURFACE WATER: Grab SEDIMENT: Grab				

DETAILED SAMPLE LOCATION DESCRIPTION

Water dripping down cliff and accumulated in small rock pool. Directed by Phillip the same location as JNM last time. Sed collected from sand down gradient of SW location.

ENVIRONMENTAL OBSERVATIONS

WEATHER	Overcast
VEGETATION	Algae
SLOPE	Vertical cliff
EROSION	Vertical cliff

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Clear, no odour or sheen, non-turbid
SEDIMENT (describe as soil)	SAND, fine to medium, pale grey to pale yellow,

FIELD MEASUREMENTS

TEMPERATURE (°C)	18.4
DO (mg/L)	5.38
DO (%S)	57.80
CONDUCTIVITY (µS/cm)	881.0
pH (pH units)	9.67
REDOX (mV)	-147.6
TDS (mg/L)	656.50

HYDROLOGICAL DATA

FLOW MEASUREMENT	Slow trickle down cliff
CROSS SECTION WIDTH (m)	0.3
DEPTH (m)	0.1
OTHER	

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0021_SW188_251021	QC162, QC262	0021_QC162_251021	0021_QC262_251021	No
0021_SD188_251021				

OTHER COMMENTS FOR CONSIDERATION

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

Adjacent to the Clay Hole, an area where clay is gathered for traditional uses.



SURFACE WATER AND SEDIMENT SAMPLING RECORD

PROJECT NO.:	12626622	SURFACE WATER ID:	0021_SW211		
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	SEDIMENT ID:			
CLIENT:	Department of Defence	DATE:	21/10/2025	TIME:	8:45:00 AM
BASE / CATCHMENT:	0021 / Mary Creek	LOGGED BY:	AD		
COORDINATES/GPS (if applicable)	289170.18, 6105844.76, See Figure 4C.				
SAMPLING METHOD (ie grab, bucket; if dry leave blank)	SURFACE WATER:		Grab	SEDIMENT:	

DETAILED SAMPLE LOCATION DESCRIPTION	Ocean, off rock shelf, Pommys Beach

ENVIRONMENTAL OBSERVATIONS

WEATHER	Overcast
VEGETATION	None
SLOPE	NA
EROSION	NA

DESCRIPTIONS

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

FIELD MEASUREMENTS

TEMPERATURE (°C)	15.5
DO (mg/L)	9.36
DO (%S)	119.50
CONDUCTIVITY (µS/cm)	48335.0
pH (pH units)	7.87
REDOX (mV)	148.9
TDS (mg/L)	33363.00

HYDROLOGICAL DATA

FLOW MEASUREMENT	NA, Ocean
CROSS SECTION WIDTH (m)	NA, Ocean
DEPTH (m)	>1
OTHER	

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0021_SW211_251021				No

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:	0021_SW212		
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	SEDIMENT ID:			
CLIENT:	Department of Defence	DATE:	21/10/2025	TIME:	1:49:00 PM
BASE / CATCHMENT:	0021 / Bherwerre Barrier	LOGGED BY:	AD		
COORDINATES/GPS (if applicable)	286718.41, 6107109.79, see Figure 3.				
SAMPLING METHOD (ie grab, bucket; if dry leave blank)	SURFACE WATER: Grab SEDIMENT:				

DETAILED SAMPLE LOCATION DESCRIPTION	Swamp over road, sample taken from edge of swamp at road

ENVIRONMENTAL OBSERVATIONS

WEATHER	Overcast
VEGETATION	Trees, reeds
SLOPE	Gentle, flat
EROSION	None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Pale yellow tinge, clear, no odour, no sheen, algae on surface at edge of water body
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	21.6
DO (mg/L)	4.88
DO (%S)	56.00
CONDUCTIVITY (µS/cm)	516.0
pH (pH units)	7.47
REDOX (mV)	31.2
TDS (mg/L)	357.50

HYDROLOGICAL DATA

FLOW MEASUREMENT	Stagnant, swamp
CROSS SECTION WIDTH (m)	<50
DEPTH (m)	>0.5
OTHER	

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0021_SW212_251021				No

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:	0021_OTH001
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	SEDIMENT ID:	
CLIENT:	Department of Defence	DATE:	22/10/2025 TIME: 2:16:00 PM
BASE / CATCHMENT:	0021 / RAN SSSS	LOGGED BY:	AD

COORDINATES/GPS (if applicable)

SAMPLING METHOD

(ie grab, bucket; if dry leave blank)

SURFACE WATER:

Grab

SEDIMENT:

DETAILED SAMPLE LOCATION DESCRIPTION

RAN SSSS S415 Sample Point tap, in shed next to tank

ENVIRONMENTAL OBSERVATIONS

WEATHER Overcast

VEGETATION NA

SLOPE NA

EROSION NA

DESCRIPTIONS

SURFACE WATER

(colour, turbidity, odour, sheen) Clear, no odour, no sheen

SEDIMENT

(describe as soil)

FIELD MEASUREMENTS

TEMPERATURE (°C) 22.3

DO (mg/L) 6.67

DO (%S) 75.40

CONDUCTIVITY (µS/cm) 215.6

pH (pH units) 6.30

REDOX (mV) 612.1

TDS (mg/L) 144.30

HYDROLOGICAL DATA

FLOW MEASUREMENT NA

CROSS SECTION WIDTH (m) NA

DEPTH (m) NA

OTHER

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0021_OTH001_251022				No

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:	0021_OTH002		
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	SEDIMENT ID:			
CLIENT:	Department of Defence	DATE:	22/10/2025	TIME:	1:39:00 PM
BASE / CATCHMENT:	0021 / RAN SSSS	LOGGED BY:	AD		

COORDINATES/GPS (if applicable)

SAMPLING METHOD

(ie grab, bucket; if dry leave blank)

SURFACE WATER:

Grab

SEDIMENT:

DETAILED SAMPLE LOCATION DESCRIPTION

RAN SSSS S416 Emergency Tank

ENVIRONMENTAL OBSERVATIONS

WEATHER Overcast

VEGETATION NA

SLOPE NA

EROSION NA

DESCRIPTIONS

SURFACE WATER

(colour, turbidity, odour, sheen) Clear, no odour, no sheen

SEDIMENT

(describe as soil)

FIELD MEASUREMENTS

TEMPERATURE (°C) 20.7

DO (mg/L) 6.55

DO (%S) 74.30

CONDUCTIVITY (µS/cm) 1062.0

pH (pH units) 6.55

REDOX (mV) 476.5

TDS (mg/L) 754.00

HYDROLOGICAL DATA

FLOW MEASUREMENT NA

CROSS SECTION WIDTH (m) NA

DEPTH (m) NA

OTHER

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0021_OTH002_251022				No

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:	0021_OTH006		
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	SEDIMENT ID:			
CLIENT:	Department of Defence	DATE:	22/10/2025	TIME:	1:50:00 PM
BASE / CATCHMENT:	0021 / RAN SSSS	LOGGED BY:	AD/AK		

COORDINATES/GPS (if applicable)

SAMPLING METHOD

(ie grab, bucket; if dry leave blank)

SURFACE WATER:

Grab

SEDIMENT:

DETAILED SAMPLE LOCATION DESCRIPTION

S482 building, red tap at back right corner, connected to OTH006 source across road

ENVIRONMENTAL OBSERVATIONS

WEATHER Overcast

VEGETATION NA

SLOPE NA

EROSION NA

DESCRIPTIONS

SURFACE WATER

(colour, turbidity, odour, sheen) Clear, no odour, no sheen

SEDIMENT

(describe as soil)

FIELD MEASUREMENTS

TEMPERATURE (°C) 25.5

DO (mg/L) 5.22

DO (%S) 64.10

CONDUCTIVITY (µS/cm) 3304.0

pH (pH units) 2.87

REDOX (mV) 1051.1

TDS (mg/L) 2125.00

HYDROLOGICAL DATA

FLOW MEASUREMENT NA

CROSS SECTION WIDTH (m) NA

DEPTH (m) NA

OTHER

SAMPLE INFORMATION

SAMPLE ID (one primary sample per row)	DUPLICATE ID (QC100, QC101)	DUPLICATE 1 SAMPLE ID (if applicable)	DUPLICATE 2 SAMPLE ID (if applicable)	LAB QC COLLECTED?
0021_OTH006_251022	QC104, QC204	0021_QC104_251022	0021_QC204_251022	Yes

OTHER COMMENTS FOR CONSIDERATION

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

Appendix E

Equipment calibration



Water Quality Meter Calibration

Project No. 12626622

Project Name: JBRF and HMAS Creswell PFAS OMP

WQM ID	GHD Staff	Date	pH 4		pH 7		Conductivity (µs/cm)		Test Outcome
Reading			Reference	Actual	Reference	Actual	Reference	Actual	
Acceptable variance			± 0.2		± 0.22		± 20		
25D10625	ES	21/10/2025	4	4.1	7.03	6.98	1143	1160	Results within range
24L01544	AK	21/10/2025	4	4.12	7.03	7.04	-	-	Results within range, EC not calibrated as temp sensor showing incorrect value (~3C higher than other probes) and a reliable calibration cant be achieved
20B122031	AD	21/10/2025	4	4.08	7.03	7.04	1143	1156	Results within range
21C100007	LR	21/10/2025	4	4.17	7.03	7	1143	1153	Results within range
25D10625	ES	22/10/2025	4	4.35	7.03	6.93	1224	1359	EC and pH 4 calibrated to reference
24L01544	AK	22/10/2025	4	4.05	7.03	7.05	-	-	Results within range, EC not calibrated as temp sensor showing incorrect value (~3C higher than other probes) and a reliable calibration cant be achieved
20B122031	AD	22/10/2025	4	4.1	7.03	7.04	1224	1241	Results within range
21C100007	LR	22/10/2025	4	4.25	7.03	6.98	1224	1238	pH 4 calibrated to reference
25D10625	ES	23/10/2025	4.01	3.72	7	6.88	1359	1345	pH 4 calibrated to reference
20B122031	AD	23/10/2025	4.01	4.07	7	7.07	1359	1481	EC calibrated to reference
24L01544	AK	23/10/2025	4.01	4.12	7	7.08	-	-	Results within range, EC not calibrated as temp sensor showing incorrect value (~3C higher than other probes) and a reliable calibration cant be achieved
21C100007	LR	23/10/2025	4.01	4.14	7	7.09	1386	1495	EC calibrated to reference

Certificate of Service and Calibration

Interface Meter

Heron H.Oil

Company Name	WAM Scientific
Office Address	26 Bungarra Crescent, Chipping Norton NSW 2170
Phone Number	+61 405 241 484
Contact Name	William Pak
Instrument	Heron H.Oil Interface Meter (60m)
Serial Number	01-7947
Client Name	Andrew Duval, Jarrad Mawbey (GHD)
Project Number	12626622
Comments	-

Instrument Check			
Item	Test	Test Passed	Comments
9V Battery	Klein Tools MM300 Multimeter	✓	Battery voltage reading above 7.9V
Battery Box	Check	✓	No damage
Face and Back Plates	Check	✓	No damage
Thumb Screws	Check	✓	Rubber ends intact
Tape Hangar/Protector	Check	✓	No damage
On/Off Button	Operation	✓	Button is functional
Buzzer	Operation	✓	Intermittent tone in H ₂ O, solid tone in product
LED Signal Light	Operation	✓	LED light functional – green and red
Probe	Operation/Check	✓	Decontaminated, cleaned and tested
Tape	Condition/Check	✓	Decontaminated and cleaned, no damage
Connection	Check	✓	Probe and link connected correctly and tightly
PCB	Operation	✓	Unit is fully functional
Electronics Panel	Orientation	✓	Correctly aligned

Instrument Readings		
Product	Buzzer	LED Light
H ₂ O	Intermittent	Blinking – Red
Petroleum	Solid	Steady – Red

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 interface meter was decontaminated, cleaned and tested with a mixture of tap water and petrol, shielded from ambient light.

Checked By	William Pak
Calibration Date	16/10/2025
Calibration Due	16/04/2026

Company Name	WAM Scientific
Office Address	26 Bungarra Crescent, Chipping Norton NSW 2170
Phone Number	+61 405 241 484
Contact Name	William Pak
Instrument	Heron H.Oil Interface Meter (60m)
Serial Number	01-8151
Client Name	Andrew Duval, Jarrad Mawbey (GHD)
Project Number	12626622
Comments	-

Instrument Check			
Item	Test	Test Passed	Comments
9V Battery	Klein Tools MM300 Multimeter	✓	Battery voltage reading above 7.9V
Battery Box	Check	✓	No damage
Face and Back Plates	Check	✓	No damage
Thumb Screws	Check	✓	Rubber ends intact
Tape Hangar/Protector	Check	✓	No damage
On/Off Button	Operation	✓	Button is functional
Buzzer	Operation	✓	Intermittent tone in H ₂ O, solid tone in product
LED Signal Light	Operation	✓	LED light functional – green and red
Probe	Operation/Check	✓	Decontaminated, cleaned and tested
Tape	Condition/Check	✓	Decontaminated and cleaned, no damage
Connection	Check	✓	Probe and link connected correctly and tightly
PCB	Operation	✓	Unit is fully functional
Electronics Panel	Orientation	✓	Correctly aligned

Instrument Readings		
Product	Buzzer	LED Light
H ₂ O	Intermittent	Blinking – Red
Petroleum	Solid	Steady – Red

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 interface meter was decontaminated, cleaned and tested with a mixture of tap water and petrol, shielded from ambient light.

Checked By	William Pak
Calibration Date	16/10/2025
Calibration Due	16/04/2026

Certificate of Service and Calibration

Interface Meter

Heron H.Oil

Company Name	WAM Scientific
Office Address	26 Bungarra Crescent, Chipping Norton NSW 2170
Phone Number	+61 405 241 484
Contact Name	William Pak
Instrument	Heron H.Oil Interface Meter (30m)
Serial Number	01-8272
Client Name	Andrew Duval, Jarrad Mawbey (GHD)
Project Number	12626622
Comments	-

Instrument Check			
Item	Test	Test Passed	Comments
9V Battery	Klein Tools MM300 Multimeter	✓	Battery voltage reading above 7.9V
Battery Box	Check	✓	No damage
Face and Back Plates	Check	✓	No damage
Thumb Screws	Check	✓	Rubber ends intact
Tape Hangar/Protector	Check	✓	No damage
On/Off Button	Operation	✓	Button is functional
Buzzer	Operation	✓	Intermittent tone in H ₂ O, solid tone in product
LED Signal Light	Operation	✓	LED light functional – green and red
Probe	Operation/Check	✓	Decontaminated, cleaned and tested
Tape	Condition/Check	✓	Decontaminated and cleaned, no damage
Connection	Check	✓	Probe and link connected correctly and tightly
PCB	Operation	✓	Unit is fully functional
Electronics Panel	Orientation	✓	Correctly aligned

Instrument Readings		
Product	Buzzer	LED Light
H ₂ O	Intermittent	Blinking – Red
Petroleum	Solid	Steady – Red

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 interface meter was decontaminated, cleaned and tested with a mixture of tap water and petrol, shielded from ambient light.

Checked By	William Pak
Calibration Date	16/10/2025
Calibration Due	16/04/2026

Certificate of Service and Calibration

Interface Meter

Heron H.Oil

Company Name	WAM Scientific
Office Address	26 Bungarra Crescent, Chipping Norton NSW 2170
Phone Number	+61 405 241 484
Contact Name	William Pak
Instrument	Heron H.Oil Interface Meter (30m)
Serial Number	01-09486
Client Name	Andrew Duval, Jarrad Mawbey (GHD)
Project Number	12626622
Comments	-

Instrument Check			
Item	Test	Test Passed	Comments
9V Battery	Klein Tools MM300 Multimeter	✓	Battery voltage reading above 7.9V
Battery Box	Check	✓	No damage
Face and Back Plates	Check	✓	No damage
Thumb Screws	Check	✓	Rubber ends intact
Tape Hangar/Protector	Check	✓	No damage
On/Off Button	Operation	✓	Button is functional
Buzzer	Operation	✓	Intermittent tone in H ₂ O, solid tone in product
LED Signal Light	Operation	✓	LED light functional – green and red
Probe	Operation/Check	✓	Decontaminated, cleaned and tested
Tape	Condition/Check	✓	Decontaminated and cleaned, no damage
Connection	Check	✓	Probe and link connected correctly and tightly
PCB	Operation	✓	Unit is fully functional
Electronics Panel	Orientation	✓	Correctly aligned

Instrument Readings		
Product	Buzzer	LED Light
H ₂ O	Intermittent	Blinking – Red
Petroleum	Solid	Steady – Red

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 interface meter was decontaminated, cleaned and tested with a mixture of tap water and petrol, shielded from ambient light.

Checked By	William Pak
Calibration Date	16/10/2025
Calibration Due	16/04/2026

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/ 4m Quatro Cable
Serial Number	20B122031
Client Name	Andrew Duval, Jarrad Mawbey (GHD)
Project Number	12626622
Comments	-

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 $\pm$ 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 $\pm$ 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 $\pm$ 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.	18.3	18.8	18.3	°C
pH	pH 4.00	417183	4.01	4.021	4.01	pH
pH	pH 7.00	419528	7.00	6.99	7.00	pH
ORP	Zobell A & B	420448/418958	243.7	267.8	243.7	mV
Conductivity	2760 μ S/cm at 25°C	399819	2760	2709	2760	μ S/cm
Zero Dissolved O ₂	NaSO ₃ in Distilled H ₂ O	426184	0.0	-1.2	0.0	%
100% Dissolved O ₂	100% Air Saturated H ₂ O	Fresh Air	100.0	83.99	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	16/10/2025
Calibration Due	16/04/2026

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/ 4m Quatro Cable
Serial Number	21C100007
Client Name	Andrew Duval, Jarrad Mawbey (GHD)
Project Number	12626622
Comments	-

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 $\pm$ 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 $\pm$ 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 $\pm$ 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.	18.5	19.1	18.5	°C
pH	pH 4.00	417183	4.01	4.06	4.01	pH
pH	pH 7.00	419528	7.00	7.32	7.00	pH
ORP	Zobell A & B	420448/418958	243.3	243.9	243.3	mV
Conductivity	2760 μ S/cm at 25°C	399819	2760	2527	2760	μ S/cm
Zero Dissolved O ₂	NaSO ₃ in Distilled H ₂ O	426184	0.0	0.66	0.0	%
100% Dissolved O ₂	100% Air Saturated H ₂ O	Fresh Air	100.0	97.7	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	16/10/2025
Calibration Due	16/04/2026

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/ 4m Quatro Cable
Serial Number	24L001544
Client Name	Andrew Duval, Jarrad Mawbey (GHD)
Project Number	12626622
Comments	-

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 $\pm$ 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 $\pm$ 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 $\pm$ 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.	18.4	23.1	18.4	°C
pH	pH 4.00	417183	4.01	4.07	4.01	pH
pH	pH 7.00	419528	7.00	7.06	7.00	pH
ORP	Zobell A & B	420448/418958	243.5	247.8	243.5	mV
Conductivity	2760 μ S/cm at 25°C	399819	2760	2513	2760	μ S/cm
Zero Dissolved O ₂	NaSO ₃ in Distilled H ₂ O	426184	0.0	0.2	0.0	%
100% Dissolved O ₂	100% Air Saturated H ₂ O	Fresh Air	100.0	98.7	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	16/10/2025
Calibration Due	16/04/2026

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/ 4m Quatro Cable
Serial Number	25D100625
Client Name	Andrew Duval, Jarrad Mawbey (GHD)
Project Number	12626622
Comments	-

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 $\pm$ 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 $\pm$ 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 $\pm$ 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.	18.7	19.5	18.7	°C
pH	pH 4.00	417183	4.01	3.59	4.01	pH
pH	pH 7.00	419528	7.00	6.77	7.00	pH
ORP	Zobell A & B	420448/418958	242.9	263.8	242.9	mV
Conductivity	2760 μ S/cm at 25°C	399819	2760	2482	2760	μ S/cm
Zero Dissolved O ₂	NaSO ₃ in Distilled H ₂ O	426184	0.0	0.2	0.0	%
100% Dissolved O ₂	100% Air Saturated H ₂ O	Fresh Air	100.0	97.4	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	16/10/2025
Calibration Due	16/04/2026

Appendix F

Laboratory certificates and chain of custody documents

Telephone : + 61-2-8784 8555

	0020_OC201_251020		20 Oct 2025 12:37	1	S														X	☐	☐	Forward with Attached COC
	0020_OC205_251023		23 Oct 2025 07:08	2	W														X	☐	☐	Forward with Attached COC
	0020_OC220_251020		20 Oct 2025 10:32	2	W														X	☐	☐	Forward with Attached COC
	0020_OC221_251020		20 Oct 2025 13:30	2	W														X	☐	☐	Forward with Attached COC
	0020_OC222_251020		20 Oct 2025 15:53	2	W														X	☐	☐	Forward with Attached COC
	0020_OC240_251020		20 Oct 2025 16:09	2	W														X	☐	☐	Forward with Attached COC
	0020_OC260_251020		20 Oct 2025 08:59	2	W														X	☐	☐	Forward with Attached COC
	0020_OC300_251020		20 Oct 2025	2	W														X	☐	☐	
	0020_OC320_251020		20 Oct 2025	2	W														X	☐	☐	
	0020_OC340_251020		20 Oct 2025	2	W														X	☐	☐	
	0020_OC360_251020		20 Oct 2025	2	W														X	☐	☐	
	0020_OCS01_251024		24 Oct 2025	2	W														X	☐	☐	Trip Blank
Receipt Detail (Lot 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 / N/A(None)	Carrier Details: Can Note #	☐ Courier/Post	☐ Client	Packaging (Ctns/Count)	Head Esky	Foam Esky	Box/Bag/Other					
Relinquished by: Andrew Duval											Signature:	Date/ Time: 24/10/2025 13:45		Received by: AJS Simkfield		Signature	Date/ Time:					
Relinquished by:											Signature:	Date/ Time:		Received by:		Signature	Date/ Time:					



SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order : **ES2533546**

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	: ACT_0020_PFASOMP_25 / HMAS Creswell PFAS Ongoing Monitoring Program	Page	: 1 of 4
Order number	: 12626622	Quote number	: ES2023GHDSER0026 (ES23GHDSER0026_V3)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: ----		
Sampler	: AD, AK, ES, LR		

Dates

Date Samples Received	: 24-Oct-2025 14:30	Issue Date	: 27-Oct-2025
Client Requested Due Date	: 31-Oct-2025	Scheduled Reporting Date	: 31-Oct-2025

Delivery Details

Mode of Delivery	: Undefined	Security Seal	: Not Available
No. of coolers/boxes	: 1	Temperature	: 1.7°C, 1.7°C, 1.3°C - Ice present
Receipt Detail	:	No. of samples received / analysed	: 52 / 52

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" samples have been sent to eurofins for analysis
- **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.

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: **SOIL**

Laboratory sample ID	Sampling date / time	Sample ID	SOIL - EA055-103 Moisture Content	SOIL - EP231X (solids) PFAS - Full Suite (30 analytes)
ES2533546-022	20-Oct-2025 11:00	0020_SD002_251020	✓	✓
ES2533546-023	20-Oct-2025 08:40	0020_SD004_251020	✓	✓
ES2533546-024	20-Oct-2025 16:28	0020_SD019_251020	✓	✓
ES2533546-025	20-Oct-2025 00:00	0020_SD024_251020	✓	✓
ES2533546-041	20-Oct-2025 12:37	0020_QC101_251020	✓	✓

Matrix: **WATER**

Laboratory sample ID	Sampling date / time	Sample ID	WATER - EP231X PFAS - Full Suite (31 analytes)
ES2533546-001	23-Oct-2025 07:21	0020_MW001_251023	✓
ES2533546-002	23-Oct-2025 07:08	0020_MW007_251023	✓
ES2533546-003	20-Oct-2025 10:56	0020_MW012A_251020	✓
ES2533546-004	20-Oct-2025 14:17	0020_MW017_251020	✓
ES2533546-005	20-Oct-2025 14:54	0020_MW037_251020	✓
ES2533546-006	20-Oct-2025 13:54	0020_MW052_251020	✓
ES2533546-007	20-Oct-2025 15:53	0020_MW055_251020	✓
ES2533546-008	20-Oct-2025 09:13	0020_MW056_251020	✓
ES2533546-009	20-Oct-2025 10:18	0020_MW057_251020	✓
ES2533546-010	20-Oct-2025 10:40	0020_MW058_251020	✓
ES2533546-011	20-Oct-2025 09:55	0020_MW059_251020	✓
ES2533546-012	20-Oct-2025 12:31	0020_MW068_251020	✓
ES2533546-013	20-Oct-2025 14:40	0020_MW069_251020	✓
ES2533546-014	20-Oct-2025 13:30	0020_MW070_251020	✓
ES2533546-015	20-Oct-2025 16:02	0020_MW071_251020	✓
ES2533546-016	20-Oct-2025 15:40	0020_MW102D_251020	✓
ES2533546-017	20-Oct-2025 16:14	0020_MW102S_251020	✓
ES2533546-018	20-Oct-2025 16:04	0020_MW104_251020	✓



				WATER - EP231X PFAS - Full Suite (31 analytes)
ES2533546-019	20-Oct-2025 16:09	0020_MW109_251020	✓	
ES2533546-020	20-Oct-2025 16:14	0020_MW110_251020	✓	
ES2533546-021	20-Oct-2025 14:01	0020_MW112_251020	✓	
ES2533546-026	20-Oct-2025 00:00	0020_SW004_251020	✓	
ES2533546-027	20-Oct-2025 00:00	0020_SW005_251020	✓	
ES2533546-028	20-Oct-2025 00:00	0020_SW010_251020	✓	
ES2533546-029	20-Oct-2025 00:00	0020_SW011_251020	✓	
ES2533546-030	20-Oct-2025 11:50	0020_SW012_251020	✓	
ES2533546-031	20-Oct-2025 09:11	0020_SW016_251020	✓	
ES2533546-032	20-Oct-2025 10:32	0020_SW026_251020	✓	
ES2533546-033	20-Oct-2025 11:00	0020_SW027_251020	✓	
ES2533546-034	20-Oct-2025 08:40	0020_SW029_251020	✓	
ES2533546-035	22-Oct-2025 08:10	0020_SW030_251022	✓	
ES2533546-036	20-Oct-2025 10:24	0020_SW033_251020	✓	
ES2533546-037	20-Oct-2025 08:32	0020_SW037_251020	✓	
ES2533546-038	20-Oct-2025 13:11	0020_SW054_251020	✓	
ES2533546-039	20-Oct-2025 08:59	0020_SW057_251020	✓	
ES2533546-040	20-Oct-2025 08:32	0020_QC100_251020	✓	
ES2533546-042	23-Oct-2025 07:08	0020_QC105_251023	✓	
ES2533546-043	20-Oct-2025 10:32	0020_QC120_251020	✓	
ES2533546-044	20-Oct-2025 13:30	0020_QC121_251020	✓	
ES2533546-045	20-Oct-2025 15:53	0020_QC122_251020	✓	
ES2533546-046	20-Oct-2025 16:09	0020_QC140_251020	✓	
ES2533546-047	20-Oct-2025 08:59	0020_QC160_251020	✓	
ES2533546-048	20-Oct-2025 00:00	0020_QC300_251020	✓	
ES2533546-049	20-Oct-2025 00:00	0020_QC320_251020	✓	
ES2533546-050	20-Oct-2025 00:00	0020_QC340_251020	✓	
ES2533546-051	20-Oct-2025 00:00	0020_QC360_251020	✓	
ES2533546-052	24-Oct-2025 00:00	0020_QC501_251024	✓	

Proactive Holding Time Report

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



Requested Deliverables

Accounts Payable Australia

- A4 - AU Tax Invoice (INV)

Email accountspayableAU@ghd.com

ANDREW DUVAL

- *AU Certificate of Analysis - NATA (COA)
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)
- Chain of Custody (CoC) (COC)
- EDI Format - ESDAT (ESDAT)
- Electronic SRN for ESdat (ESRN_ESDAT)

Email andrew.duval@ghd.com
Email andrew.duval@ghd.com
Email andrew.duval@ghd.com
Email andrew.duval@ghd.com
Email andrew.duval@ghd.com
Email andrew.duval@ghd.com
Email andrew.duval@ghd.com

DREW MORGAN

- *AU Certificate of Analysis - NATA (COA)
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)
- Chain of Custody (CoC) (COC)
- EDI Format - ESDAT (ESDAT)
- Electronic SRN for ESdat (ESRN_ESDAT)

Email drew.morgan@ghd.com
Email drew.morgan@ghd.com
Email drew.morgan@ghd.com
Email drew.morgan@ghd.com
Email drew.morgan@ghd.com
Email drew.morgan@ghd.com
Email drew.morgan@ghd.com

esdat

- *AU Certificate of Analysis - NATA (COA)
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)
- Chain of Custody (CoC) (COC)
- EDI Format - ESDAT (ESDAT)
- Electronic SRN for ESdat (ESRN_ESDAT)

Email esdat+ghd_au@esdatlabsync.net
Email esdat+ghd_au@esdatlabsync.net
Email esdat+ghd_au@esdatlabsync.net
Email esdat+ghd_au@esdatlabsync.net
Email esdat+ghd_au@esdatlabsync.net
Email esdat+ghd_au@esdatlabsync.net
Email esdat+ghd_au@esdatlabsync.net

HELEN MILNE

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

Email helen.milne@ghd.com
Email helen.milne@ghd.com
Email helen.milne@ghd.com
Email helen.milne@ghd.com
Email helen.milne@ghd.com
Email helen.milne@ghd.com
Email helen.milne@ghd.com
Email helen.milne@ghd.com

STEVEN CASTILLO

- A4 - AU Tax Invoice (INV)

Email steven.castillo@ghd.com



CERTIFICATE OF ANALYSIS

Work Order	: ES2533546	Page	: 1 of 27
Amendment	: 1		
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	: ACT_0020_PFASOMP_25 / HMAS Creswell PFAS Ongoing Monitoring Program	Date Samples Received	: 24-Oct-2025 14:30
Order number	: 12626622	Date Analysis Commenced	: 28-Oct-2025
C-O-C number	: ----	Issue Date	: 20-Nov-2025 12:05
Sampler	: AD, AK, ES, LR		
Site	: ----		
Quote number	: ES23GHDSE0026_V3		
No. of samples received	: 52		
No. of samples analysed	: 52		



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
Franco Lentini	LCMS Coordinator	Sydney Inorganics, Smithfield, NSW
Franco Lentini	LCMS Coordinator	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.
- Amendment (20/11/2025): This report has been amended following a change to the EP231X results reported for samples "0020_SD024_251020" (ES2533546-025) and "0020_QC101_251020" (ES2533546-041) due to a data update as per client request. All details are recorded in client query 25SYCC480.
- EP231: Stable isotope enriched internal standards are added to samples prior to extraction. Target compounds have a direct analogous internal standard with the exception of PFPeS, PFHpA, PFDS, PFTrDA and 10:2 FTS. These compounds use an internal standard that is chemically related and has a retention time close to that of the target compound. The DQO for internal standard response is 50-150% of that established at initial calibration or as per USEPA 1633 limits where listed. PFOS is quantified using a certified, traceable standard consisting of linear and branched PFOS isomers. These practices are in line with recommendations in the National Environmental Management Plan for PFAS and also conform to QSM 5.4 (US DoD) requirements.
- EP231X-INJ: The direct injection LCMSMS method may be used where the sample matrix is not suitable for Solid Phase Extraction (e.g. significant particulate load) or where only a single sample container is received.



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	0020_SD002_251020	0020_SD004_251020	0020_SD019_251020	0020_SD024_251020	0020_QC101_251020
Sampling date / time					20-Oct-2025 11:00	20-Oct-2025 08:40	20-Oct-2025 16:28	20-Oct-2025 00:00	20-Oct-2025 12:37
Compound	CAS Number	LOR	Unit		ES2533546-022	ES2533546-023	ES2533546-024	ES2533546-025	ES2533546-041
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	-----	0.1	%		22.7	31.0	25.1	78.5	84.2
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	0.0032	0.0030
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	0.0003	0.0003
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg		0.0004	0.0005	0.0019	0.0743	0.113
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	0.0011	0.0015
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg		<0.001	<0.001	<0.001	<0.001	<0.001
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	0.0003	0.0004
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	0.0004	0.0005
Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	0.0004	0.0006
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	0.0005	0.0011
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0006
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	0020_SD002_251020	0020_SD004_251020	0020_SD019_251020	0020_SD024_251020	0020_QC101_251020
Sampling date / time					20-Oct-2025 11:00	20-Oct-2025 08:40	20-Oct-2025 16:28	20-Oct-2025 00:00	20-Oct-2025 12:37
Compound	CAS Number	LOR	Unit		ES2533546-022	ES2533546-023	ES2533546-024	ES2533546-025	ES2533546-041
					Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0006
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0006
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0006
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0006
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
EP231P: PFAS Sums									
Sum of PFAS	----	0.0002	mg/kg		0.0004	0.0005	0.0019	0.0819	0.123
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg		0.0004	0.0005	0.0019	0.0775	0.116
Sum of PFAS (WA DER List)	----	0.0002	mg/kg		0.0004	0.0005	0.0019	0.0782	0.117
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		101	109	98.8	99.8	109
13C8-PFOA	----	0.0002	%		94.7	94.9	96.4	93.0	90.0



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				0020_MW001_251023	0020_MW007_251023	0020_MW012A_251020	0020_MW017_251020	0020_MW037_251020
Sampling date / time				23-Oct-2025 07:21	23-Oct-2025 07:08	20-Oct-2025 10:56	20-Oct-2025 14:17	20-Oct-2025 14:54
Compound	CAS Number	LOR	Unit	ES2533546-001	ES2533546-002	ES2533546-003	ES2533546-004	ES2533546-005
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.03	<0.02	1.19
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.05	0.02	1.24
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	0.02	0.08	0.94	0.28	8.31
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.08	0.02	0.53
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.10	3.27	0.48	2.62
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	0.7
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.03	<0.02	2.35
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.14	0.05	3.42
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.02	<0.02	0.51
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.06	0.02	0.73
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

				0020_MW001_251023	0020_MW007_251023	0020_MW012A_251020	0020_MW017_251020	0020_MW037_251020
Sampling date / time				23-Oct-2025 07:21	23-Oct-2025 07:08	20-Oct-2025 10:56	20-Oct-2025 14:17	20-Oct-2025 14:54
Compound	CAS Number	LOR	Unit	ES2533546-001	ES2533546-002	ES2533546-003	ES2533546-004	ES2533546-005
				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	6.93
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	0.02	0.18	4.62	0.87	29.1
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	0.02	0.18	4.21	0.76	10.9
Sum of PFAS (WA DER List)	----	0.01	µg/L	0.02	0.18	4.49	0.83	26.8
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	88.0	88.2	89.3	91.4	90.2
13C8-PFOA	----	0.02	%	87.4	90.9	88.1	89.8	92.5



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				0020_MW052_251020	0020_MW055_251020	0020_MW056_251020	0020_MW057_251020	0020_MW058_251020
Sampling date / time				20-Oct-2025 13:54	20-Oct-2025 15:53	20-Oct-2025 09:13	20-Oct-2025 10:18	20-Oct-2025 10:40
Compound	CAS Number	LOR	Unit	ES2533546-006	ES2533546-007	ES2533546-008	ES2533546-009	ES2533546-010
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	0.02	0.06	0.09	0.19	0.17
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.04	0.82	0.56	1.06
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	0.04	0.04	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	0.02	0.01	0.02
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

				0020_MW052_251020	0020_MW055_251020	0020_MW056_251020	0020_MW057_251020	0020_MW058_251020
Sampling date / time				20-Oct-2025 13:54	20-Oct-2025 15:53	20-Oct-2025 09:13	20-Oct-2025 10:18	20-Oct-2025 10:40
Compound	CAS Number	LOR	Unit	ES2533546-006	ES2533546-007	ES2533546-008	ES2533546-009	ES2533546-010
				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	0.02	0.10	0.97	0.80	1.27
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	0.02	0.10	0.91	0.75	1.23
Sum of PFAS (WA DER List)	----	0.01	µg/L	0.02	0.10	0.97	0.80	1.27
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	88.6	85.6	89.7	88.8	88.5
13C8-PFOA	----	0.02	%	91.4	93.4	92.7	91.6	89.4



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				0020_MW059_251020	0020_MW068_251020	0020_MW069_251020	0020_MW070_251020	0020_MW071_251020
Sampling date / time				20-Oct-2025 09:55	20-Oct-2025 12:31	20-Oct-2025 14:40	20-Oct-2025 13:30	20-Oct-2025 16:02
Compound	CAS Number	LOR	Unit	ES2533546-011	ES2533546-012	ES2533546-013	ES2533546-014	ES2533546-015
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	0.40	0.09	0.01	0.08	0.02
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	0.67	<0.01	0.01	0.34	<0.01
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	0.04	<0.02	<0.02	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	0.02	<0.01	<0.01	<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

				0020_MW059_251020	0020_MW068_251020	0020_MW069_251020	0020_MW070_251020	0020_MW071_251020
Sampling date / time				20-Oct-2025 09:55	20-Oct-2025 12:31	20-Oct-2025 14:40	20-Oct-2025 13:30	20-Oct-2025 16:02
Compound	CAS Number	LOR	Unit	ES2533546-011	ES2533546-012	ES2533546-013	ES2533546-014	ES2533546-015
				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	1.15	0.09	0.02	0.44	0.02
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	1.07	0.09	0.02	0.42	0.02
Sum of PFAS (WA DER List)	----	0.01	µg/L	1.13	0.09	0.02	0.44	0.02
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	88.8	86.0	88.8	90.8	85.6
13C8-PFOA	----	0.02	%	88.7	90.0	92.1	90.6	92.0



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				0020_MW102D_25102 0	0020_MW102S_25102 0	0020_MW104_251020	0020_MW109_251020	0020_MW110_251020
Sampling date / time				20-Oct-2025 15:40	20-Oct-2025 16:14	20-Oct-2025 16:04	20-Oct-2025 16:09	20-Oct-2025 16:14
Compound	CAS Number	LOR	Unit	ES2533546-016	ES2533546-017	ES2533546-018	ES2533546-019	ES2533546-020
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	0.02	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	0.02	<0.02	<0.02	<0.02	0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	0.16	0.08	0.01	0.28	0.59
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	<0.02	0.02	0.09
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	0.12	0.12	0.01	0.66	4.20
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	0.3
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	0.58
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	0.02	<0.02	<0.02	0.06	0.10
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	0.06
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	<0.01	0.02	0.07
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

				0020_MW102D_25102 0	0020_MW102S_25102 0	0020_MW104_251020	0020_MW109_251020	0020_MW110_251020
Sampling date / time				20-Oct-2025 15:40	20-Oct-2025 16:14	20-Oct-2025 16:04	20-Oct-2025 16:09	20-Oct-2025 16:14
Compound	CAS Number	LOR	Unit	ES2533546-016	ES2533546-017	ES2533546-018	ES2533546-019	ES2533546-020
				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	0.34	0.20	0.02	1.04	6.01
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	0.28	0.20	0.02	0.94	4.79
Sum of PFAS (WA DER List)	----	0.01	µg/L	0.32	0.20	0.02	1.02	5.90
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	89.8	83.5	92.6	91.4	96.5
13C8-PFOA	----	0.02	%	92.3	80.0	90.1	87.8	92.5



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				0020_MW112_251020	0020_SW004_251020	0020_SW005_251020	0020_SW010_251020	0020_SW011_251020
Sampling date / time				20-Oct-2025 14:01	20-Oct-2025 00:00	20-Oct-2025 00:00	20-Oct-2025 00:00	20-Oct-2025 00:00
Compound	CAS Number	LOR	Unit	ES2533546-021	ES2533546-026	ES2533546-027	ES2533546-028	ES2533546-029
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	0.13	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	0.12	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	1.09	0.05	0.05	0.04	0.06
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	0.12	0.08	0.08	0.09	0.04
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	0.12	<0.02	<0.02	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	0.33	<0.02	<0.02	<0.02	<0.02
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	0.07	<0.02	<0.02	<0.02	<0.02
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	0.10	<0.01	<0.01	<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

				0020_MW112_251020	0020_SW004_251020	0020_SW005_251020	0020_SW010_251020	0020_SW011_251020
Sampling date / time				20-Oct-2025 14:01	20-Oct-2025 00:00	20-Oct-2025 00:00	20-Oct-2025 00:00	20-Oct-2025 00:00
Compound	CAS Number	LOR	Unit	ES2533546-021	ES2533546-026	ES2533546-027	ES2533546-028	ES2533546-029
				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	2.11	0.13	0.13	0.13	0.10
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	1.21	0.13	0.13	0.13	0.10
Sum of PFAS (WA DER List)	----	0.01	µg/L	1.96	0.13	0.13	0.13	0.10
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	95.0	91.1	97.2	88.2	93.5
13C8-PFOA	----	0.02	%	94.1	97.4	95.2	92.3	90.5



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				0020_SW012_251020	0020_SW016_251020	0020_SW026_251020	0020_SW027_251020	0020_SW029_251020
Sampling date / time				20-Oct-2025 11:50	20-Oct-2025 09:11	20-Oct-2025 10:32	20-Oct-2025 11:00	20-Oct-2025 08:40
Compound	CAS Number	LOR	Unit	ES2533546-030	ES2533546-031	ES2533546-032	ES2533546-033	ES2533546-034
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.03	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.20	<0.01	0.02	0.03
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.29	0.01	0.02	0.03
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	0.04	<0.02	<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	0.02	<0.01	<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	0020_SW012_251020	0020_SW016_251020	0020_SW026_251020	0020_SW027_251020	0020_SW029_251020
Sampling date / time					20-Oct-2025 11:50	20-Oct-2025 09:11	20-Oct-2025 10:32	20-Oct-2025 11:00	20-Oct-2025 08:40
Compound	CAS Number	LOR	Unit		ES2533546-030	ES2533546-031	ES2533546-032	ES2533546-033	ES2533546-034
					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		<0.01	0.58	0.01	0.04	0.06
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		<0.01	0.49	0.01	0.04	0.06
Sum of PFAS (WA DER List)	----	0.01	µg/L		<0.01	0.58	0.01	0.04	0.06
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		92.5	90.2	93.8	93.5	85.0
13C8-PFOA	----	0.02	%		93.6	95.3	90.8	93.9	90.5



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				0020_SW030_251022	0020_SW033_251020	0020_SW037_251020	0020_SW054_251020	0020_SW057_251020
Sampling date / time				22-Oct-2025 08:10	20-Oct-2025 10:24	20-Oct-2025 08:32	20-Oct-2025 13:11	20-Oct-2025 08:59
Compound	CAS Number	LOR	Unit	ES2533546-035	ES2533546-036	ES2533546-037	ES2533546-038	ES2533546-039
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.03	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	0.04	<0.01	0.14	0.12	0.20
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	<0.02	0.03	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	0.04	0.01	0.35	0.54	0.95
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	<0.02	0.03	<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	0.01	0.02	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

				0020_SW030_251022	0020_SW033_251020	0020_SW037_251020	0020_SW054_251020	0020_SW057_251020
Sampling date / time				22-Oct-2025 08:10	20-Oct-2025 10:24	20-Oct-2025 08:32	20-Oct-2025 13:11	20-Oct-2025 08:59
Compound	CAS Number	LOR	Unit	ES2533546-035	ES2533546-036	ES2533546-037	ES2533546-038	ES2533546-039
				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	0.08	0.01	0.53	0.74	1.16
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	0.08	0.01	0.49	0.66	1.15
Sum of PFAS (WA DER List)	----	0.01	µg/L	0.08	0.01	0.53	0.71	1.16
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	96.2	91.2	87.6	88.8	89.4
13C8-PFOA	----	0.02	%	100	94.8	95.8	91.9	93.2



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				0020_QC100_251020	0020_QC105_251023	0020_QC120_251020	0020_QC121_251020	0020_QC122_251020
Sampling date / time				20-Oct-2025 08:32	23-Oct-2025 07:08	20-Oct-2025 10:32	20-Oct-2025 13:30	20-Oct-2025 15:53
Compound	CAS Number	LOR	Unit	ES2533546-040	ES2533546-042	ES2533546-043	ES2533546-044	ES2533546-045
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	0.03	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	0.22	0.08	<0.01	0.08	0.05
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	0.34	0.16	<0.01	0.41	0.05
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	0.04	<0.02	<0.02	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	0.02	<0.01	<0.01	<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

				0020_QC100_251020	0020_QC105_251023	0020_QC120_251020	0020_QC121_251020	0020_QC122_251020
Sampling date / time				20-Oct-2025 08:32	23-Oct-2025 07:08	20-Oct-2025 10:32	20-Oct-2025 13:30	20-Oct-2025 15:53
Compound	CAS Number	LOR	Unit	ES2533546-040	ES2533546-042	ES2533546-043	ES2533546-044	ES2533546-045
				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	0.65	0.24	<0.01	0.51	0.10
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	0.56	0.24	<0.01	0.49	0.10
Sum of PFAS (WA DER List)	----	0.01	µg/L	0.65	0.24	<0.01	0.51	0.10
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	90.0	99.3	101	98.3	87.6
13C8-PFOA	----	0.02	%	95.4	98.9	106	98.8	96.3



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				0020_QC140_251020	0020_QC160_251020	0020_QC300_251020	0020_QC320_251020	0020_QC340_251020
Sampling date / time				20-Oct-2025 16:09	20-Oct-2025 08:59	20-Oct-2025 00:00	20-Oct-2025 00:00	20-Oct-2025 00:00
Compound	CAS Number	LOR	Unit	ES2533546-046	ES2533546-047	ES2533546-048	ES2533546-049	ES2533546-050
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	0.29	0.17	<0.01	<0.01	<0.01
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	0.80	0.82	<0.01	<0.01	<0.01
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	0.06	<0.02	<0.02	<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	0.02	<0.01	<0.01	<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

				0020_QC140_251020	0020_QC160_251020	0020_QC300_251020	0020_QC320_251020	0020_QC340_251020
Sampling date / time				20-Oct-2025 16:09	20-Oct-2025 08:59	20-Oct-2025 00:00	20-Oct-2025 00:00	20-Oct-2025 00:00
Compound	CAS Number	LOR	Unit	ES2533546-046	ES2533546-047	ES2533546-048	ES2533546-049	ES2533546-050
				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	1.19	0.99	<0.01	<0.01	<0.01
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	1.09	0.99	<0.01	<0.01	<0.01
Sum of PFAS (WA DER List)	----	0.01	µg/L	1.17	0.99	<0.01	<0.01	<0.01
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	89.9	94.6	93.9	91.1	93.4
13C8-PFOA	----	0.02	%	91.2	95.7	97.3	95.8	98.4



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				0020_QC360_251020	0020_QC501_251024	----	----	----
Sampling date / time				20-Oct-2025 00:00	24-Oct-2025 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2533546-051	ES2533546-052	-----	-----	-----
				Result	Result	----	----	----
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluoropropane sulfonic acid (PFPrS)	423-41-6	0.02	µg/L	----	<0.02	----	----	----
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	----	<0.02	----	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	----	<0.02	----	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	----	<0.01	----	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	----	<0.02	----	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	----	<0.01	----	----	----
Perfluorononane sulfonic acid (PFNS)	68259-12-1	0.02	µg/L	----	<0.02	----	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	----	<0.02	----	----	----
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	----	----	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	----	----	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	----	----	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	----	----	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	----	----	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	----	----	----	----
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	0.10	µg/L	----	<0.10	----	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	----	<0.02	----	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	----	<0.02	----	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	----	<0.02	----	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	----	<0.01	----	----	----



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				0020_QC360_251020	0020_QC501_251024	----	----	----
Sampling date / time				20-Oct-2025 00:00	24-Oct-2025 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2533546-051	ES2533546-052	-----	-----	-----
				Result	Result	----	----	----
EP231B: Perfluoroalkyl Carboxylic Acids - Continued								
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	----	<0.02	----	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	----	<0.02	----	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	----	<0.02	----	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	----	<0.02	----	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	----	<0.02	----	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	----	<0.05	----	----	----
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	----	----	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	----	----	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	----	----	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	----	----	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	----	----	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	----	----	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	----	----	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	----	----	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	----	----	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	----	----	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	----	----	----	----
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	----	<0.02	----	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	----	<0.05	----	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	----	<0.05	----	----	----



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				0020_QC360_251020	0020_QC501_251024	----	----	----
Sampling date / time				20-Oct-2025 00:00	24-Oct-2025 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2533546-051	ES2533546-052	-----	-----	-----
				Result	Result	----	----	----
EP231C: Perfluoroalkyl Sulfonamides - Continued								
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	----	<0.05	----	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	----	<0.05	----	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	----	<0.02	----	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	----	<0.02	----	----	----
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	----	----	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	----	----	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	----	----	----	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	----	----	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	----	----	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	----	----	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<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	----	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	----	<0.05	----	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	----	<0.05	----	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	----	<0.05	----	----	----



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				0020_QC360_251020	0020_QC501_251024	----	----	----
Sampling date / time				20-Oct-2025 00:00	24-Oct-2025 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2533546-051	ES2533546-052	-----	-----	-----
				Result	Result	----	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	----	----	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	----	----	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	----	----	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	----	----	----	----
EP231P: PFAS Sums								
Sum of PFAS	----	0.01	µg/L	----	<0.01	----	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	----	<0.01	----	----	----
Sum of PFAS (WA DER List)	----	0.01	µg/L	----	<0.01	----	----	----
Sum of PFAS	----	0.01	µg/L	<0.01	----	----	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	----	----	----	----
Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	----	----	----	----
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	93.9	----	----	----	----
13C4-PFOS	----	0.02	%	----	87.6	----	----	----
13C8-PFOA	----	0.02	%	96.9	----	----	----	----
13C8-PFOA	----	0.02	%	----	88.3	----	----	----



Surrogate Control Limits

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

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



QA/QC Compliance Assessment to assist with Quality Review

Work Order	: ES2533546	Page	: 1 of 10
Amendment	: 1		
Client	: GHD PTY LTD	Laboratory	: Environmental Division Sydney
Contact	: MS HELEN MILNE	Telephone	: +61-2-8784 8555
Project	: ACT_0020_PFASOMP_25 / HMAS Creswell PFAS Ongoing Monitoring Program	Date Samples Received	: 24-Oct-2025
Site	: ----	Issue Date	: 20-Nov-2025
Sampler	: AD, AK, ES, LR	No. of samples received	: 52
Order number	: 12626622	No. of samples analysed	: 52

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

- Quality Control Sample Frequency Outliers exist - please see following pages for full details.



Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Matrix Spike (MS) Recoveries							
EP231A: Perfluoroalkyl Sulfonic Acids	ES2528988--028	Anonymous	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	ES2528988--028	Anonymous	Perfluorooctane sulfonic acid (PFOS)	1763-23-1	Not Determined	----	MS recovery not determined, background level greater than or equal to 4x spike level.
EP231A: Perfluoroalkyl Sulfonic Acids	ES2528988--028	Anonymous	Perfluorodecane sulfonic acid (PFDS)	335-77-3	Not Determined	----	MS recovery not determined, background level greater than or equal to 4x spike level.
EP231C: Perfluoroalkyl Sulfonamides	ES2528988--028	Anonymous	Perfluorooctane sulfonamide (FOSA)	754-91-6	Not Determined	----	MS recovery not determined, background level greater than or equal to 4x spike level.

Outliers : Frequency of Quality Control Samples

Matrix: **WATER**

Quality Control Sample Type		Count		Rate (%)		Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	
Laboratory Duplicates (DUP)						
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-INJ	0	1	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)						
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-INJ	0	1	0.00	5.00	NEPM 2013 B3 & ALS QC Standard

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: **SOIL**

Evaluation: ✖ = Holding time breach ; ✔ = Within holding time.

Method	Sample Date	Extraction / Preparation			Analysis			
Container / Client Sample ID(s)		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation	
EA055: Moisture Content (Dried @ 105-110°C)								
HDPE Soil Jar (EA055)								
0020_SD002_251020,	0020_SD004_251020,	20-Oct-2025	----	----	----	28-Oct-2025	03-Nov-2025	✔
0020_SD019_251020,	0020_SD024_251020,							
0020_QC101_251020								



Matrix: **SOIL**

Evaluation: ✖ = Holding time breach ; ✔ = Within holding time.

Method	Sample Date	Extraction / Preparation			Analysis			
Container / Client Sample ID(s)		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation	
EP231A: Perfluoroalkyl Sulfonic Acids								
HDPE Soil Jar (EP231X) 0020_SD024_251020, 0020_QC101_251020	20-Oct-2025	30-Oct-2025	18-Apr-2026	✔	20-Nov-2025	09-Dec-2025	✔	
HDPE Soil Jar (EP231X) 0020_SD002_251020, 0020_SD019_251020	20-Oct-2025	30-Oct-2025	18-Apr-2026	✔	31-Oct-2025	09-Dec-2025	✔	
EP231B: Perfluoroalkyl Carboxylic Acids								
HDPE Soil Jar (EP231X) 0020_SD024_251020, 0020_QC101_251020	20-Oct-2025	30-Oct-2025	18-Apr-2026	✔	20-Nov-2025	09-Dec-2025	✔	
HDPE Soil Jar (EP231X) 0020_SD002_251020, 0020_SD019_251020	20-Oct-2025	30-Oct-2025	18-Apr-2026	✔	31-Oct-2025	09-Dec-2025	✔	
EP231C: Perfluoroalkyl Sulfonamides								
HDPE Soil Jar (EP231X) 0020_SD024_251020, 0020_QC101_251020	20-Oct-2025	30-Oct-2025	18-Apr-2026	✔	20-Nov-2025	09-Dec-2025	✔	
HDPE Soil Jar (EP231X) 0020_SD002_251020, 0020_SD019_251020	20-Oct-2025	30-Oct-2025	18-Apr-2026	✔	31-Oct-2025	09-Dec-2025	✔	
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
HDPE Soil Jar (EP231X) 0020_SD024_251020, 0020_QC101_251020	20-Oct-2025	30-Oct-2025	18-Apr-2026	✔	20-Nov-2025	09-Dec-2025	✔	
HDPE Soil Jar (EP231X) 0020_SD002_251020, 0020_SD019_251020	20-Oct-2025	30-Oct-2025	18-Apr-2026	✔	31-Oct-2025	09-Dec-2025	✔	
EP231P: PFAS Sums								
HDPE Soil Jar (EP231X) 0020_SD024_251020, 0020_QC101_251020	20-Oct-2025	30-Oct-2025	18-Apr-2026	✔	20-Nov-2025	09-Dec-2025	✔	
HDPE Soil Jar (EP231X) 0020_SD002_251020, 0020_SD019_251020	20-Oct-2025	30-Oct-2025	18-Apr-2026	✔	31-Oct-2025	09-Dec-2025	✔	

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

Page : 4 of 10
 Work Order : ES2533546 Amendment 1
 Client : GHD PTY LTD
 Project : ACT_0020_PFASOMP_25 / HMAS Creswell PFAS Ongoing Monitoring Program



Matrix: **WATER**

Evaluation: ✖ = Holding time breach ; ✔ = Within holding time.

Method	Sample Date	Extraction / Preparation			Analysis			
Container / Client Sample ID(s)		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation	
EP231A: Perfluoroalkyl Sulfonic Acids								
HDPE (no PTFE) (EP231X) 0020_MW012A_251020, 0020_MW037_251020, 0020_MW055_251020, 0020_MW057_251020, 0020_MW059_251020, 0020_MW069_251020, 0020_MW071_251020, 0020_MW102S_251020, 0020_MW109_251020, 0020_MW112_251020, 0020_SW005_251020, 0020_SW011_251020, 0020_SW016_251020, 0020_SW027_251020, 0020_SW033_251020, 0020_SW054_251020, 0020_QC100_251020, 0020_QC121_251020, 0020_QC140_251020, 0020_QC300_251020, 0020_QC340_251020,	0020_MW017_251020, 0020_MW052_251020, 0020_MW056_251020, 0020_MW058_251020, 0020_MW068_251020, 0020_MW070_251020, 0020_MW102D_251020, 0020_MW104_251020, 0020_MW110_251020, 0020_SW004_251020, 0020_SW010_251020, 0020_SW012_251020, 0020_SW026_251020, 0020_SW029_251020, 0020_SW037_251020, 0020_SW057_251020, 0020_QC120_251020, 0020_QC122_251020, 0020_QC160_251020, 0020_QC320_251020, 0020_QC360_251020	20-Oct-2025	29-Oct-2025	18-Apr-2026	✔	31-Oct-2025	18-Apr-2026	✔
HDPE (no PTFE) (EP231X) 0020_SW030_251022		22-Oct-2025	29-Oct-2025	20-Apr-2026	✔	31-Oct-2025	20-Apr-2026	✔
HDPE (no PTFE) (EP231X) 0020_MW001_251023, 0020_QC105_251023	0020_MW007_251023,	23-Oct-2025	29-Oct-2025	21-Apr-2026	✔	31-Oct-2025	21-Apr-2026	✔
HDPE (no PTFE) (EP231X-INJ) 0020_QC501_251024		24-Oct-2025	30-Oct-2025	22-Apr-2026	✔	31-Oct-2025	22-Apr-2026	✔



Matrix: WATER

Evaluation: ✖ = Holding time breach ; ✔ = Within holding time.

Method	Sample Date	Extraction / Preparation			Analysis			
Container / Client Sample ID(s)		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation	
EP231B: Perfluoroalkyl Carboxylic Acids								
HDPE (no PTFE) (EP231X) 0020_MW012A_251020, 0020_MW037_251020, 0020_MW055_251020, 0020_MW057_251020, 0020_MW059_251020, 0020_MW069_251020, 0020_MW071_251020, 0020_MW102S_251020, 0020_MW109_251020, 0020_MW112_251020, 0020_SW005_251020, 0020_SW011_251020, 0020_SW016_251020, 0020_SW027_251020, 0020_SW033_251020, 0020_SW054_251020, 0020_QC100_251020, 0020_QC121_251020, 0020_QC140_251020, 0020_QC300_251020, 0020_QC340_251020,	0020_MW017_251020, 0020_MW052_251020, 0020_MW056_251020, 0020_MW058_251020, 0020_MW068_251020, 0020_MW070_251020, 0020_MW102D_251020, 0020_MW104_251020, 0020_MW110_251020, 0020_SW004_251020, 0020_SW010_251020, 0020_SW012_251020, 0020_SW026_251020, 0020_SW029_251020, 0020_SW037_251020, 0020_SW057_251020, 0020_QC120_251020, 0020_QC122_251020, 0020_QC160_251020, 0020_QC320_251020, 0020_QC360_251020	20-Oct-2025	29-Oct-2025	18-Apr-2026	✔	31-Oct-2025	18-Apr-2026	✔
HDPE (no PTFE) (EP231X) 0020_SW030_251022		22-Oct-2025	29-Oct-2025	20-Apr-2026	✔	31-Oct-2025	20-Apr-2026	✔
HDPE (no PTFE) (EP231X) 0020_MW001_251023, 0020_QC105_251023	0020_MW007_251023,	23-Oct-2025	29-Oct-2025	21-Apr-2026	✔	31-Oct-2025	21-Apr-2026	✔
HDPE (no PTFE) (EP231X-INJ) 0020_QC501_251024		24-Oct-2025	30-Oct-2025	22-Apr-2026	✔	31-Oct-2025	22-Apr-2026	✔



Matrix: WATER

Evaluation: ✖ = Holding time breach ; ✔ = Within holding time.

Method	Sample Date	Extraction / Preparation			Analysis			
Container / Client Sample ID(s)		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation	
EP231C: Perfluoroalkyl Sulfonamides								
HDPE (no PTFE) (EP231X) 0020_MW012A_251020, 0020_MW037_251020, 0020_MW055_251020, 0020_MW057_251020, 0020_MW059_251020, 0020_MW069_251020, 0020_MW071_251020, 0020_MW102S_251020, 0020_MW109_251020, 0020_MW112_251020, 0020_SW005_251020, 0020_SW011_251020, 0020_SW016_251020, 0020_SW027_251020, 0020_SW033_251020, 0020_SW054_251020, 0020_QC100_251020, 0020_QC121_251020, 0020_QC140_251020, 0020_QC300_251020, 0020_QC340_251020,	0020_MW017_251020, 0020_MW052_251020, 0020_MW056_251020, 0020_MW058_251020, 0020_MW068_251020, 0020_MW070_251020, 0020_MW102D_251020, 0020_MW104_251020, 0020_MW110_251020, 0020_SW004_251020, 0020_SW010_251020, 0020_SW012_251020, 0020_SW026_251020, 0020_SW029_251020, 0020_SW037_251020, 0020_SW057_251020, 0020_QC120_251020, 0020_QC122_251020, 0020_QC160_251020, 0020_QC320_251020, 0020_QC360_251020	20-Oct-2025	29-Oct-2025	18-Apr-2026	✔	31-Oct-2025	18-Apr-2026	✔
HDPE (no PTFE) (EP231X) 0020_SW030_251022		22-Oct-2025	29-Oct-2025	20-Apr-2026	✔	31-Oct-2025	20-Apr-2026	✔
HDPE (no PTFE) (EP231X) 0020_MW001_251023, 0020_QC105_251023	0020_MW007_251023,	23-Oct-2025	29-Oct-2025	21-Apr-2026	✔	31-Oct-2025	21-Apr-2026	✔
HDPE (no PTFE) (EP231X-INJ) 0020_QC501_251024		24-Oct-2025	30-Oct-2025	22-Apr-2026	✔	31-Oct-2025	22-Apr-2026	✔



Matrix: **WATER**

Evaluation: ✖ = Holding time breach ; ✔ = Within holding time.

Method	Sample Date	Extraction / Preparation			Analysis			
Container / Client Sample ID(s)		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation	
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
HDPE (no PTFE) (EP231X) 0020_MW012A_251020, 0020_MW037_251020, 0020_MW055_251020, 0020_MW057_251020, 0020_MW059_251020, 0020_MW069_251020, 0020_MW071_251020, 0020_MW102S_251020, 0020_MW109_251020, 0020_MW112_251020, 0020_SW005_251020, 0020_SW011_251020, 0020_SW016_251020, 0020_SW027_251020, 0020_SW033_251020, 0020_SW054_251020, 0020_QC100_251020, 0020_QC121_251020, 0020_QC140_251020, 0020_QC300_251020, 0020_QC340_251020,	0020_MW017_251020, 0020_MW052_251020, 0020_MW056_251020, 0020_MW058_251020, 0020_MW068_251020, 0020_MW070_251020, 0020_MW102D_251020, 0020_MW104_251020, 0020_MW110_251020, 0020_SW004_251020, 0020_SW010_251020, 0020_SW012_251020, 0020_SW026_251020, 0020_SW029_251020, 0020_SW037_251020, 0020_SW057_251020, 0020_QC120_251020, 0020_QC122_251020, 0020_QC160_251020, 0020_QC320_251020, 0020_QC360_251020	20-Oct-2025	29-Oct-2025	18-Apr-2026	✔	31-Oct-2025	18-Apr-2026	✔
HDPE (no PTFE) (EP231X) 0020_SW030_251022		22-Oct-2025	29-Oct-2025	20-Apr-2026	✔	31-Oct-2025	20-Apr-2026	✔
HDPE (no PTFE) (EP231X) 0020_MW001_251023, 0020_QC105_251023	0020_MW007_251023,	23-Oct-2025	29-Oct-2025	21-Apr-2026	✔	31-Oct-2025	21-Apr-2026	✔
HDPE (no PTFE) (EP231X-INJ) 0020_QC501_251024		24-Oct-2025	30-Oct-2025	22-Apr-2026	✔	31-Oct-2025	22-Apr-2026	✔



Matrix: WATER

Evaluation: ✖ = Holding time breach ; ✔ = Within holding time.

Method	Sample Date	Extraction / Preparation			Analysis			
Container / Client Sample ID(s)		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation	
EP231P: PFAS Sums								
HDPE (no PTFE) (EP231X) 0020_MW012A_251020, 0020_MW037_251020, 0020_MW055_251020, 0020_MW057_251020, 0020_MW059_251020, 0020_MW069_251020, 0020_MW071_251020, 0020_MW102S_251020, 0020_MW109_251020, 0020_MW112_251020, 0020_SW005_251020, 0020_SW011_251020, 0020_SW016_251020, 0020_SW027_251020, 0020_SW033_251020, 0020_SW054_251020, 0020_QC100_251020, 0020_QC121_251020, 0020_QC140_251020, 0020_QC300_251020, 0020_QC340_251020,	0020_MW017_251020, 0020_MW052_251020, 0020_MW056_251020, 0020_MW058_251020, 0020_MW068_251020, 0020_MW070_251020, 0020_MW102D_251020, 0020_MW104_251020, 0020_MW110_251020, 0020_SW004_251020, 0020_SW010_251020, 0020_SW012_251020, 0020_SW026_251020, 0020_SW029_251020, 0020_SW037_251020, 0020_SW057_251020, 0020_QC120_251020, 0020_QC122_251020, 0020_QC160_251020, 0020_QC320_251020, 0020_QC360_251020	20-Oct-2025	29-Oct-2025	18-Apr-2026	✔	31-Oct-2025	18-Apr-2026	✔
HDPE (no PTFE) (EP231X) 0020_SW030_251022		22-Oct-2025	29-Oct-2025	20-Apr-2026	✔	31-Oct-2025	20-Apr-2026	✔
HDPE (no PTFE) (EP231X) 0020_MW001_251023, 0020_QC105_251023	0020_MW007_251023,	23-Oct-2025	29-Oct-2025	21-Apr-2026	✔	31-Oct-2025	21-Apr-2026	✔
HDPE (no PTFE) (EP231X-INJ) 0020_QC501_251024		24-Oct-2025	30-Oct-2025	22-Apr-2026	✔	31-Oct-2025	22-Apr-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: **SOIL**

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)							
Moisture Content	EA055	2	19	10.53	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	16	12.50	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	16	6.25	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	16	6.25	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	16	6.25	5.00	✓	NEPM 2013 B3 & ALS QC Standard

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	6	49	12.24	10.00	✔	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-INJ	0	1	0.00	10.00	✖	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	3	49	6.12	5.00	✔	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-INJ	1	1	100.00	5.00	✔	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	3	49	6.12	5.00	✔	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-INJ	1	1	100.00	5.00	✔	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	3	49	6.12	5.00	✔	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-INJ	0	1	0.00	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
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM Schedule B(3).
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	SOIL	In-house: Analysis of soils by solvent extraction followed by negative mode LC-ESI-MS/MS using MRM and isotope dilution or internal standard quantitation. A portion of homogenised sample is extracted along with isotope dilution standards (where commercially available) in a solution of ammonium acetate in acetonitrile/methanol. Where relevant, interferences from co-extracted organics are removed using dispersive clean-up media (dSPE). A portion of extract is combined with an equal volume of reagent water and filtered for instrumental analysis.
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.
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-INJ	WATER	In house: Direct injection analysis of fresh waters after dilution (1:1) with mobile phase solvent. Analysis by LC-Electrospray-MS-MS, Negative Mode using MRM. Where commercially available, isotopically labelled analogues of the target analytes are used as internal standards for quantification. Where a labelled analogue is not commercially available, the internal standard with similar chemistry and the closest retention time to the target is used for quantification. The DQO for internal standard response is 50-150% of that established at initial calibration. PFOS is quantified using a certified, traceable standard consisting of linear and branched PFOS isomers.
Preparation Methods	Method	Matrix	Method Descriptions
QuEChERS Extraction of Solids	ORG71	SOIL	In house: Sequential extractions with Acetonitrile/Methanol by shaking. Extraction efficiency aided by the addition of salts under acidic conditions. Where relevant, interferences from co-extracted organics are removed with dispersive clean-up media (dSPE). The extract is either diluted or concentrated and exchanged into the analytical solvent.
Preparation for PFAS in water.	EP231-PR	WATER	Method presumes direct injection without workup. Preparation includes addition of internal standard and surrogate, and filtration prior to analysis.
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.



QUALITY CONTROL REPORT

Work Order : **ES2533546**

Page : 1 of 20

Amendment : **1**

Client : **GHD PTY LTD**

Contact : **MS HELEN MILNE**

Address : **LEVEL 15, 133 CASTLEREAGH STREET
SYDNEY NSW, AUSTRALIA 2000**

Telephone : **+61 02 9239 7100**

Project : **ACT_0020_PFASOMP_25 / HMAS Creswell PFAS Ongoing
Monitoring Program**

Order number : **12626622**

C-O-C number : **----**

Sampler : **AD, AK, ES, LR**

Site : **----**

Quote number : **ES23GHDSE0026_V3**

No. of samples received : **52**

No. of samples analysed : **52**

Laboratory : **Environmental Division Sydney**

Contact : **Samiksha Sathish**

Address : **277-289 Woodpark Road Smithfield NSW Australia 2164**

Telephone : **+61-2-8784 8555**

Date Samples Received : **24-Oct-2025**

Date Analysis Commenced : **28-Oct-2025**

Issue Date : **20-Nov-2025**



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
Franco Lentini	LCMS Coordinator	Sydney Inorganics, Smithfield, NSW
Franco Lentini	LCMS Coordinator	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

* = The final LOR has been raised due to dilution or other sample specific cause; adjusted LOR is shown in brackets. The duplicate ranges for Acceptable RPD% are applied to the final LOR where applicable.

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: **SOIL**

Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 6961093)									
ES2533521-062	Anonymous	EA055: Moisture Content	----	0.1	%	82.9	79.9	3.7	0% - 20%
ES2533521-070	Anonymous	EA055: Moisture Content	----	0.1	%	39.6	42.6	7.4	0% - 20%
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 6965918)									
ES2528988-028	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	0.0012	0.0012	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	0.0026	0.0025	7.0	0% - 50%
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	0.0285	0.0291	2.0	0% - 20%
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	0.0044	0.0044	0.0	0% - 20%
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002 (0.0050)*	mg/kg	1.12	1.14	1.3	0% - 20%
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	0.0347	0.0342	1.4	0% - 20%
ES2533554-003	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 6965918)									
ES2528988-028	Anonymous	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	0.0003	0.0003	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	0.0017	0.0019	9.2	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	0.0006	0.0006	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	0.0045	0.0047	4.6	0% - 20%



Sub-Matrix: SOIL				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: 6965918) - continued									
ES2528988-028	Anonymous	EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	0.0002	0.0002	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
ES2533554-003	Anonymous	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 6965918)									
ES2528988-028	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	0.0350	0.0327	6.9	0% - 20%
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	0.0003	0.0002	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
ES2533554-003	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit

EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 6963236)



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: 6963236) - continued									
ES2533546-020	0020_MW110_251020	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	0.59	0.59	0.0	0% - 20%
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	4.20	3.77	10.8	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	0.03	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	0.09	0.08	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
ES2533546-038	0020_SW054_251020	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	0.12	0.14	16.8	0% - 50%
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	0.54	0.48	10.5	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	0.03	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: 6963252)									
ES2533552-003	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	<0.01	<0.01	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
ES2533617-002	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	<0.01	<0.01	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
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 6963234)									
ES2533546-004	0020_MW017_251020	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	0.02	0.02	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	0.05	0.05	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 (PFTTrDA)	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



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: 6963234) - continued									
ES2533546-011	0020_MW059_251020	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	0.02	0.03	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	0.04	0.04	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 (PFTTrDA)	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: 6963236)									
ES2533546-020	0020_MW110_251020	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	0.07	0.08	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	0.58	0.60	2.7	0% - 20%
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	0.10	0.11	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	0.06	0.06	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 (PFTTrDA)	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	0.3	0.3	0.0	No Limit		
ES2533546-038	0020_SW054_251020	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	0.02	0.02	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	0.03	0.04	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 (PFTTrDA)	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: 6963252)									
ES2533552-003	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



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: 6963252) - continued									
ES2533552-003	Anonymous	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
ES2533617-002	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
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 6963234)									
ES2533546-004	0020_MW017_251020	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
ES2533546-011	0020_MW059_251020	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



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: 6963234) - continued									
ES2533546-011	0020_MW059_251020	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: 6963236)									
ES2533546-020	0020_MW110_251020	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
ES2533546-038	0020_SW054_251020	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: 6963252)									
ES2533552-003	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



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: 6963252) - continued									
ES2533552-003	Anonymous	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
ES2533617-002	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
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 6963234)									
ES2533546-004	0020_MW017_251020	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
ES2533546-011	0020_MW059_251020	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
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 6963236)									
ES2533546-020	0020_MW110_251020	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	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: 6963236) - continued									
ES2533546-020	0020_MW110_251020	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
ES2533546-038	0020_SW054_251020	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
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 6963252)									
ES2533552-003	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
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
ES2533617-002	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
		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: 6963234)									
ES2533546-004	0020_MW017_251020	EP231X: Sum of PFAS	----	0.01	µg/L	0.87	0.84	3.5	0% - 20%
ES2533546-011	0020_MW059_251020	EP231X: Sum of PFAS	----	0.01	µg/L	1.15	1.29	11.5	0% - 20%
EP231P: PFAS Sums (QC Lot: 6963236)									
ES2533546-020	0020_MW110_251020	EP231X: Sum of PFAS	----	0.01	µg/L	6.01	5.64	6.4	0% - 20%
ES2533546-038	0020_SW054_251020	EP231X: Sum of PFAS	----	0.01	µg/L	0.74	0.70	5.6	0% - 20%
EP231P: PFAS Sums (QC Lot: 6963252)									
ES2533552-003	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
ES2533617-002	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit

Sub-Matrix: SOIL				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%)	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result		LCS	Low	High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6965918)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	0.00125 mg/kg	89.7	72.0	128
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	112	73.0	123
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	92.5	67.0	130
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	107	70.0	132
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	98.9	68.0	136
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	102	59.0	134
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6965918)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	0.00625 mg/kg	99.7	71.0	135
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	94.3	69.0	132
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	99.4	70.0	132
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	98.1	71.0	131
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	104	69.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	99.3	72.0	129
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	0.00125 mg/kg	92.9	69.0	133
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	104	64.0	136
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	92.0	69.0	135
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	107	66.0	139
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	93.4	69.0	133
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6965918)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	116	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	0.00312 mg/kg	113	71.6	129
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	119	69.8	131
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	112	68.7	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	121	65.1	134
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	93.3	63.0	144
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	103	61.0	139
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6965918)								



Sub-Matrix: SOIL				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%)	Acceptable Limits (%)	
Method: <i>Compound</i>	CAS Number	LOR	Unit			LCS	Low	High
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6965918) - continued								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	0.00125 mg/kg	101	62.0	145
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	0.00125 mg/kg	87.0	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	0.00125 mg/kg	110	65.0	137
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	0.00125 mg/kg	108	69.2	143

Sub-Matrix: WATER				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%) LCS	Acceptable Limits (%) Low High	
Method: Compound	CAS Number	LOR	Unit	Result				
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6963234)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.25 µg/L	84.5	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.25 µg/L	99.7	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.25 µg/L	91.8	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	90.4	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.25 µg/L	90.6	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6963236)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.25 µg/L	107	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.25 µg/L	102	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.25 µg/L	105	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	122	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.25 µg/L	113	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.25 µg/L	101	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6963252)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.25 µg/L	95.8	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.25 µg/L	113	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.25 µg/L	82.3	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	103	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.25 µg/L	105	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.25 µg/L	85.0	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6967492)								
EP231X-INJ: Perfluoropropane sulfonic acid (PFPrS)	423-41-6	0.02	µg/L	<0.02	0.5 µg/L	91.7	70.0	130
EP231X-INJ: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.5 µg/L	88.5	72.0	130
EP231X-INJ: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.5 µg/L	93.3	71.0	127
EP231X-INJ: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.5 µg/L	93.0	68.0	131
EP231X-INJ: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.5 µg/L	95.1	69.0	134



Sub-Matrix: **WATER**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%) LCS	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result			Low	High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6967492) - continued								
EP231X-INJ: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.5 µg/L	91.5	65.0	140
EP231X-INJ: Perfluorononane sulfonic acid (PFNS)	68259-12-1	0.02	µg/L	<0.02	0.5 µg/L	81.2	70.0	130
EP231X-INJ: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.5 µg/L	96.1	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6963234)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	97.5	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	101	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	108	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	111	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	94.3	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	95.5	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	85.3	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	99.9	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	78.6	72.0	134
EP231X: Perfluorotridecanoic acid (PFTriDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	68.0	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	100	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6963236)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	109	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	114	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	115	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	103	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	108	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	113	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	111	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	117	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	110	72.0	134
EP231X: Perfluorotridecanoic acid (PFTriDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	92.1	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	125	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6963252)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	95.9	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	88.1	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	92.4	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	85.8	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	106	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	97.8	69.0	130



Sub-Matrix: **WATER**

Sub-Matrix: WATER				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%) LCS	Acceptable Limits (%) Low High	
Method: Compound	CAS Number	LOR	Unit	Result				
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6963252) - continued								
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	89.8	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	96.9	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	74.4	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	75.9	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	85.6	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6967492)								
EP231X-INJ: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.10	2.5 µg/L	103	73.0	129
EP231X-INJ: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.5 µg/L	104	72.0	129
EP231X-INJ: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.5 µg/L	100.0	72.0	129
EP231X-INJ: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.5 µg/L	99.0	72.0	130
EP231X-INJ: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.5 µg/L	98.6	71.0	133
EP231X-INJ: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.5 µg/L	98.6	69.0	130
EP231X-INJ: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.5 µg/L	104	71.0	129
EP231X-INJ: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.5 µg/L	117	69.0	133
EP231X-INJ: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.5 µg/L	116	72.0	134
EP231X-INJ: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.5 µg/L	95.0	65.0	144
EP231X-INJ: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	1.25 µg/L	103	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6963234)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	100	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	106	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	96.3	62.6	147
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	117	66.0	145
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	111	57.6	145
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	92.5	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	110	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6963236)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	116	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	126	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	101	62.6	147
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	112	66.0	145



Sub-Matrix: **WATER**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%) LCS	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result			Low	High
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6963236) - continued								
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	118	57.6	145
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	117	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	99.4	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6963252)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	113	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	112	62.6	147
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	116	66.0	145
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	120	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	117	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6967492)								
EP231X-INJ: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.5 µg/L	103	67.0	137
EP231X-INJ: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	1.25 µg/L	98.5	68.0	141
EP231X-INJ: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	1.25 µg/L	105	68.4	127
EP231X-INJ: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	1.25 µg/L	125	64.4	132
EP231X-INJ: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	1.25 µg/L	110	60.2	125
EP231X-INJ: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.5 µg/L	106	65.0	136
EP231X-INJ: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.5 µg/L	107	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6963234)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.25 µg/L	102	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	88.7	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	112	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	106	71.4	144
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6963236)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.25 µg/L	101	63.0	143



Sub-Matrix: **WATER**

Sub-Matrix: WATER				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%) LCS	Acceptable Limits (%) Low High	
Method: Compound	CAS Number	LOR	Unit	Result				
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6963236) - continued								
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.25 µg/L	96.9	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	117	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	99.9	71.4	144
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6963252)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.25 µg/L	95.5	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	112	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	116	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	85.0	71.4	144
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6967492)								
EP231X-INJ: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.5 µg/L	97.2	63.0	143
EP231X-INJ: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.5 µg/L	92.8	64.0	140
EP231X-INJ: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.5 µg/L	97.4	67.0	138
EP231X-INJ: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	0.5 µg/L	102	62.7	135
EP231P: PFAS Sums (QCLot: 6967492)								
EP231X-INJ: Sum of PFAS	----	0.01	µg/L	<0.01	----	----	----	----
EP231X-INJ: Sum of PFHxS and PFOS	355-46-4/17 63-23-1	0.01	µg/L	<0.01	----	----	----	----
EP231X-INJ: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	----	----	----	----

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: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6965918)							
ES2528988-028	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.00125 mg/kg	121	72.0	128
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.00125 mg/kg	87.6	73.0	123
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.00125 mg/kg	# Not Determined	67.0	130
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.00125 mg/kg	121	70.0	132
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.00125 mg/kg	# Not Determined	68.0	136
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.00125 mg/kg	# Not Determined	59.0	134



Sub-Matrix: SOIL				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: 6965918)							
ES2528988-028	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.00625 mg/kg	102	71.0	135
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.00125 mg/kg	97.4	69.0	132
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.00125 mg/kg	128	70.0	132
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.00125 mg/kg	94.1	71.0	131
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.00125 mg/kg	129	69.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.00125 mg/kg	98.0	72.0	129
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.00125 mg/kg	98.0	69.0	133
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.00125 mg/kg	86.9	64.0	136
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.00125 mg/kg	101	69.0	135
		EP231X: Perfluorotridecanoic acid (PFTTrDA)	72629-94-8	0.00125 mg/kg	107	66.0	139
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.00312 mg/kg	89.5	69.0	133
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6965918)							
ES2528988-028	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.00125 mg/kg	# Not Determined	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.00312 mg/kg	122	71.6	129
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.00312 mg/kg	115	69.8	131
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.00312 mg/kg	113	68.7	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.00312 mg/kg	120	65.1	134
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.00125 mg/kg	104	63.0	144
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.00125 mg/kg	99.0	61.0	139
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6965918)							
ES2528988-028	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.00125 mg/kg	92.0	62.0	145
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.00125 mg/kg	88.3	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.00125 mg/kg	83.5	65.0	137
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.00125 mg/kg	77.9	69.2	143



Sub-Matrix: **WATER**

Sub-Matrix: WATER				Matrix Spike (MS) Report			
				Spike	Spike Recovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6963234) - continued							
ES2533546-002	0020_MW007_251023	EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.25 µg/L	91.2	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.25 µg/L	93.1	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6963236)							
ES2533546-035	0020_SW030_251022	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.25 µg/L	107	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.25 µg/L	97.7	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.25 µg/L	97.7	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.25 µg/L	109	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.25 µg/L	109	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.25 µg/L	90.6	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6963252)							
ES2533552-003	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.25 µg/L	94.4	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.25 µg/L	104	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.25 µg/L	80.7	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.25 µg/L	126	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.25 µg/L	108	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.25 µg/L	106	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6963234)							
ES2533546-002	0020_MW007_251023	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	102	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	107	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	108	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	110	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	98.8	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	98.1	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	99.0	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	111	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	90.6	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTTrDA)	72629-94-8	0.25 µg/L	81.4	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	93.4	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6963236)							
ES2533546-035	0020_SW030_251022	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	102	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	110	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	113	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	107	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	107	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	110	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	118	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	110	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	112	72.0	134



Sub-Matrix: **WATER**

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: 6963236) - continued							
ES2533546-035	0020_SW030_251022	EP231X: Perfluorotridecanoic acid (PFTTrDA)	72629-94-8	0.25 µg/L	89.0	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	124	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6963252)							
ES2533552-003	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	97.4	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	89.2	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	97.4	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	95.0	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	118	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	101	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	93.5	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	104	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	79.0	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTTrDA)	72629-94-8	0.25 µg/L	73.1	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	97.6	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6963234)							
ES2533546-002	0020_MW007_251023	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	106	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	108	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	98.6	62.6	147
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	122	66.0	145
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	115	57.6	145
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	93.2	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	111	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6963236)							
ES2533546-035	0020_SW030_251022	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	108	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	112	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	127	62.6	147
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	124	66.0	145
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	117	57.6	145
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	111	65.0	136



Sub-Matrix: **WATER**

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: 6963236) - continued							
ES2533546-035	0020_SW030_251022	EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	95.6	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6963252)							
ES2533552-003	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	97.4	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	129	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	116	62.6	147
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	120	66.0	145
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	115	57.6	145
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	105	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	106	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6963234)							
ES2533546-002	0020_MW007_251023	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.25 µg/L	105	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.25 µg/L	94.6	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.25 µg/L	116	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.25 µg/L	103	71.4	144
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6963236)							
ES2533546-035	0020_SW030_251022	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	91.6	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.25 µg/L	110	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.25 µg/L	82.1	71.4	144
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6963252)							
ES2533552-003	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.25 µg/L	101	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.25 µg/L	114	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.25 µg/L	109	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.25 µg/L	80.6	71.4	144

Mandatory Fields

CHAIN OF CUSTODY

Page 1 of 1

CLIENT CODE:

*PROJECT
MANAGER: Helen Milne

SAMPLER AD / AK / ES / LR

*CLIENT: GHD Pty Ltd

*PM
MOBILE: 0410 533 325

SAMPLER
MOBILE: 0468 301 344

OFFICE: Sydney

ALS QUOTE # ES23GHDSE0026
(Client PI # Blank)

PURCHASE
ORDER NO: 12626622

PROJECT NO/PROJECT ACT_0021_PFRASOMP_25 / Jervis Bay Range Facility PFAS Ongoing Monitoring Program

SITE: 0021 Jervis Bay Range Facility

*INVOICE TO: accounts payable@ghd.com; steven.castillo@ghd.com

X CC Invoice to PM

*EMAIL REPORTS TO: andrew.dual@ghd.com; drew.morgan@ghd.com; helen.milne@ghd.com; esd@ghd.com; esd@ghd.com; esd@ghd.com

*ANALYSIS REQUIRED

Country of Origin:

BIOSECURITY



Environmental Division
Sydney
Work Order Reference
ES2533521



Telephone : - 61-2-8784 8555

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

☒ 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)

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

Where Materials are required, specify Total (undisturbed bottles required) or Disturbed (field filtered bottle required).
Mark an X in the boxes below analysis to indicate the parameter listed above to be tested on that sample.

EP231X (PFAS - Full Suite (30 analytes))
EP231X (solids) PFAS - Full Suite (30 analytes)
EP231X-LL - PFAS - Low level Full Suite (30 analytes) (<0.002 - 0.01 ug/L)
HOLD
Forward to Eurofins

ALS Use Only	Sample ID	Depth	Date/Time	No. Bottles	MATRIX: Soil/Solid(S) Water(W) Sediments (SD), Dust (D), Product (P), Biota (B), Biosolid (BS)	Lab QC (additional bottles req.)	MS	Additional Information (Comment on hazards - e.g. asbestos, known high contamination)
1	0021_MW018_251021		21 Oct 2025 16:49	4	W	X	X	Additional bottles for Lab QC
2	0021_MW020_251021		21 Oct 2025 15:24	2	W	X	X	
3	0021_MW021_251021		21 Oct 2025 14:48	2	W	X	X	
4	0021_MW022_251023		23 Oct 2025 15:06	2	W	X	X	
5	0021_MW026_251021		21 Oct 2025 13:51	4	W	X	X	Additional bottles for Lab QC
6	0021_MW028_251021		21 Oct 2025 10:59	2	W	X	X	
7	0021_MW030_251022		22 Oct 2025 14:51	2	W	X	X	
8	0021_MW060_251023		23 Oct 2025 13:57	4	W	X	X	Additional bottles for Lab QC
9	0021_MW061_251023		23 Oct 2025 13:25	2	W	X	X	
10	0021_MW062_251022		22 Oct 2025 15:18	4	W	X	X	Additional bottles for Lab QC
11	0021_MW063_251022		22 Oct 2025 10:52	4	W	X	X	Additional bottles for Lab QC
12	0021_MW064_251022		22 Oct 2025 14:15	2	W	X	X	
13	0021_MW065_251022		22 Oct 2025 15:06	4	W	X	X	Additional bottles for Lab QC
14	0021_MW070_251023		23 Oct 2025 12:25	2	W	X	X	
15	0021_MW071_251023		23 Oct 2025 13:31	2	W	X	X	

Subcon Forward Lab Split WO ES2533538

Organised By / Date:
Refined/Inhibited By / Date:
Corroborate / Corroborate:
WO No:
Attached By PO / Internal Sheet:

Rec: 24/10/25 1630.

0021_QC202_251021		21 Oct 2025 07:54	2	W														X	☐	☐	Forward with Attached COC
0021_QC203_251021		21 Oct 2025 10:55	2	W														X	☐	☐	Forward with Attached COC
0021_QC204_251022		22 Oct 2025 13:50	2	W														X	☐	☐	Forward with Attached COC
0021_QC223_251021		21 Oct 2025 10:59	2	W														X	☐	☐	Forward with Attached COC
0021_QC224_251021		21 Oct 2025 14:48	2	W														X	☐	☐	Forward with Attached COC
0021_QC225_251022		22 Oct 2025 08:38	2	W														X	☐	☐	Forward with Attached COC
0021_QC226_251022		22 Oct 2025 10:50	1	S														X	☐	☐	Forward with Attached COC
0021_QC227_251022		22 Oct 2025 15:46	2	W														X	☐	☐	Forward with Attached COC
0021_QC240_251021		21 Oct 2025 11:45	2	W														X	☐	☐	Forward with Attached COC
0021_QC241_251022		22 Oct 2025 11:38	2	W														X	☐	☐	Forward with Attached COC
0021_QC242_251022		22 Oct 2025 15:18	2	W														X	☐	☐	Forward with Attached COC
0021_QC261_251021		21 Oct 2025 09:27	2	W														X	☐	☐	Forward with Attached COC
0021_QC262_251021		21 Oct 2025 15:03	2	W														X	☐	☐	Forward with Attached COC
0021_QC265_251022		22 Oct 2025 14:15	2	W														X	☐	☐	Forward with Attached COC
0021_QC266_251023		23 Oct 2025 11:27	2	W														X	☐	☐	Forward with Attached COC
0021_QC301_251021		21 Oct 2025	2	W														X	☐	☐	
0021_QC302_251022		22 Oct 2025	2	W														X	☐	☐	
0021_QC304_251023		23 Oct 2025	2	W														X	☐	☐	
0021_QC321_251021		21 Oct 2025	2	W														X	☐	☐	
0021_QC322_251022		22 Oct 2025	2	W														X	☐	☐	
0021_QC324_251023		23 Oct 2025	2	W														X	☐	☐	
0021_QC341_251021		21 Oct 2025	2	W														X	☐	☐	
0021_QC342_251022		22 Oct 2025	2	W														X	☐	☐	
0021_QC343_251023		23 Oct 2025	2	W														X	☐	☐	
0021_QC361_251021		21 Oct 2025	2	W														X	☐	☐	
0021_QC362_251022		22 Oct 2025	2	W														X	☐	☐	
0021_QC364_251023		23 Oct 2025	2	W														X	☐	☐	
0021_QC502_251024		24 Oct 2025	1	S														X	☐	☐	Trip Blank
0021_QC503_251024		24 Oct 2025	2	W														X	☐	☐	Trip Blank

Relinquished by:	Andrew David	Signature:	via Email	Date/Time	24/10/2025 13:45	Received by:	ALS Smithfield	Signature:	Date/Time
Relinquished by:		Signature:		Date/Time		Received by:		Signature:	Date/Time



SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order : **ES2533521**

Amendment : **2**

Client : **GHD PTY LTD**
Contact : **MS HELEN MILNE**
Address : **LEVEL 15, 133 CASTLEREAGH STREET
SYDNEY NSW, AUSTRALIA 2000**

Laboratory : **Environmental Division Sydney**
Contact : **Samiksha Sathish**
Address : **277-289 Woodpark Road Smithfield
NSW Australia 2164**

E-mail : **helen.milne@ghd.com**
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E-mail : **samiksha.sathish@alsglobal.com**
Telephone : **+61-2-8784 8555**
Facsimile : **+61-2-8784 8500**

Project : **ACT_0021_PFASOMP_25 / Jervis Bay
Range Facility PFAS Ongoing
Monitoring Program**

Page : **1 of 5**

Order number : **12626622**

Quote number : **ES2023GHDSE0026
(ES23GHDSE0026_V3)**

C-O-C number : **----**

QC Level : **NEPM 2013 B3 & ALS QC Standard**

Site : **0021 Jervis Bay Range Facility**

Sampler : **AD / AK / ES / LR**

Dates

Date Samples Received : **24-Oct-2025 16:30**
Client Requested Due Date : **04-Mar-2026**

Issue Date : **04-Mar-2026**
Scheduled Reporting Date : **04-Mar-2026**

Delivery Details

Mode of Delivery : **Undefined**
No. of coolers/boxes : **6**

Security Seal : **Not Available**
Temperature : **1.7°C, 1.7°C, 1.3°C - Ice
present**

Receipt Detail : **Hard Eskey's**

No. of samples received / analysed : **81 / 79**

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
- **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.**
- [28/10/2025]: This is an updated SRN which indicates the change in sample dates for samples 010, 011, 012, 013 & 035
- **Split Workorder - Remaining samples have been logged under ES2533538**
- 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.

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: **SOIL**

Laboratory sample ID	Sampling date / time	Sample ID	SOIL - EA055-103 Moisture Content	SOIL - EP231X (solids) PFAS - Full Suite (30 analytes)
ES2533521-060	23-Oct-2025 12:00	0021_SD009_251023	✓	✓
ES2533521-061	22-Oct-2025 11:35	0021_SD011_251022	✓	✓
ES2533521-062	22-Oct-2025 10:50	0021_SD018_251022	✓	✓
ES2533521-063	21-Oct-2025 16:54	0021_SD021_251021	✓	✓
ES2533521-064	21-Oct-2025 07:54	0021_SD035_251021	✓	✓
ES2533521-065	21-Oct-2025 09:14	0021_SD036_251021	✓	✓
ES2533521-066	21-Oct-2025 09:59	0021_SD037_251021	✓	✓
ES2533521-067	21-Oct-2025 16:27	0021_SD040_251021	✓	✓
ES2533521-068	21-Oct-2025 08:21	0021_SD044_251021	✓	✓
ES2533521-069	21-Oct-2025 07:52	0021_SD046_251021	✓	✓
ES2533521-070	23-Oct-2025 09:16	0021_SD066_251023	✓	✓
ES2533521-071	23-Oct-2025 08:59	0021_SD067_251023	✓	✓
ES2533521-072	23-Oct-2025 08:43	0021_SD068_251023	✓	✓
ES2533521-073	23-Oct-2025 08:04	0021_SD069_251023	✓	✓
ES2533521-074	21-Oct-2025 15:03	0021_SD188_251021	✓	✓

Matrix: **WATER**

Laboratory sample ID	Sampling date / time	Sample ID	WATER - EP231X PFAS - Full Suite (31 analytes)	WATER - EP231X-LL PFAS - Full Suite (31 analytes) Low Level
ES2533521-001	21-Oct-2025 16:49	0021_MW018_251021	✓	
ES2533521-002	21-Oct-2025 15:24	0021_MW020_251021	✓	
ES2533521-003	21-Oct-2025 14:48	0021_MW021_251021	✓	
ES2533521-004	23-Oct-2025 15:06	0021_MW022_251023	✓	
ES2533521-005	21-Oct-2025 13:51	0021_MW026_251021	✓	
ES2533521-006	21-Oct-2025 10:59	0021_MW028_251021	✓	
ES2533521-007	22-Oct-2025 14:51	0021_MW030_251022	✓	
ES2533521-008	23-Oct-2025 13:57	0021_MW060_251023	✓	



			WATER - EP231X PFAS - Full Suite (31 analytes)	WATER - EP231X-LL PFAS - Full Suite (31 analytes) Low Level
ES2533521-009	23-Oct-2025 13:25	0021_MW061_251023	✓	
ES2533521-010	22-Oct-2025 15:18	0021_MW062_251022	✓	
ES2533521-011	22-Oct-2025 10:52	0021_MW063_251022	✓	
ES2533521-012	22-Oct-2025 14:15	0021_MW064_251022	✓	
ES2533521-013	22-Oct-2025 15:06	0021_MW065_251022	✓	
ES2533521-014	23-Oct-2025 12:25	0021_MW070_251023	✓	
ES2533521-015	23-Oct-2025 13:31	0021_MW071_251023	✓	
ES2533521-016	23-Oct-2025 11:39	0021_MW072_251023	✓	
ES2533521-017	23-Oct-2025 11:58	0021_MW101_251023	✓	
ES2533521-018	22-Oct-2025 16:02	0021_MW102_251022	✓	
ES2533521-019	22-Oct-2025 12:06	0021_MW103_251022	✓	
ES2533521-020	23-Oct-2025 08:49	0021_MW105_251023	✓	
ES2533521-021	22-Oct-2025 15:06	0021_MW106_251022	✓	
ES2533521-022	23-Oct-2025 09:50	0021_MW107_251023	✓	
ES2533521-023	23-Oct-2025 11:27	0021_MW108_251023	✓	
ES2533521-024	22-Oct-2025 15:58	0021_MW109_251022	✓	
ES2533521-025	23-Oct-2025 14:37	0021_MW110_251023	✓	
ES2533521-026	23-Oct-2025 13:37	0021_MW111_251023	✓	
ES2533521-027	23-Oct-2025 15:07	0021_MW112_251023	✓	
ES2533521-028	21-Oct-2025 11:34	0021_MW117_251021	✓	
ES2533521-029	21-Oct-2025 11:45	0021_MW118_251021	✓	
ES2533521-030	21-Oct-2025 09:15	0021_MW119_251021	✓	
ES2533521-031	21-Oct-2025 09:45	0021_MW120_251021	✓	
ES2533521-032	22-Oct-2025 12:27	0021_MW121_251022	✓	
ES2533521-033	21-Oct-2025 16:15	0021_MW123_251021	✓	
ES2533521-034	23-Oct-2025 11:32	0021_MW124_251023	✓	
ES2533521-035	22-Oct-2025 09:27	0021_MW125_251022	✓	
ES2533521-036	22-Oct-2025 10:33	0021_MW126_251022	✓	
ES2533521-037	22-Oct-2025 13:44	0021_MW127_251022	✓	
ES2533521-038	21-Oct-2025 16:45	0021_MW128_251021	✓	
ES2533521-039	21-Oct-2025 13:13	0021_MW129_251021	✓	
ES2533521-040	21-Oct-2025 15:52	0021_MW130_251021	✓	
ES2533521-041	21-Oct-2025 08:36	0021_MW131_251021	✓	
ES2533521-042	21-Oct-2025 10:51	0021_MW132_251021	✓	
ES2533521-043	21-Oct-2025 10:55	0021_MW133_251021	✓	
ES2533521-044	22-Oct-2025 15:46	0021_MW134_251022	✓	
ES2533521-045	22-Oct-2025 11:34	0021_MW135_251022	✓	
ES2533521-046	22-Oct-2025 11:38	0021_MW136_251022	✓	
ES2533521-047	22-Oct-2025 12:20	0021_MW137_251022	✓	
ES2533521-048	21-Oct-2025 13:09	0021_MW138_251021	✓	
ES2533521-049	21-Oct-2025 13:37	0021_MW139_251021	✓	



			WATER - EP231X PFAS - Full Suite (31 analytes)	WATER - EP231X-LL PFAS - Full Suite (31 analytes) Low Level
ES2533521-050	21-Oct-2025 12:16	0021_MW140_251021	✓	
ES2533521-051	23-Oct-2025 08:50	0021_MW150_251023	✓	
ES2533521-052	23-Oct-2025 09:46	0021_MW153_251023	✓	
ES2533521-053	21-Oct-2025 16:12	0021_MW160_251021	✓	
ES2533521-054	22-Oct-2025 08:38	0021_MW163_251022	✓	
ES2533521-055	21-Oct-2025 14:32	0021_MW164_251021	✓	
ES2533521-056	22-Oct-2025 14:16	0021_OTH001_251022	✓	
ES2533521-057	22-Oct-2025 13:39	0021_OTH002_251022	✓	
ES2533521-058	22-Oct-2025 13:50	0021_OTH006_251022	✓	
ES2533521-075	22-Oct-2025 09:49	0021_SW002_251022	✓	
ES2533521-077	22-Oct-2025 10:50	0021_SW022_251022	✓	
ES2533521-078	22-Oct-2025 08:48	0021_SW032_251022		✓
ES2533521-079	22-Oct-2025 09:08	0021_SW034_251022		✓
ES2533521-080	21-Oct-2025 13:56	0021_SW037_251021		✓
ES2533521-081	21-Oct-2025 14:23	0021_SW040_251021		✓

Proactive Holding Time Report

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

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CERTIFICATE OF ANALYSIS

Work Order	: ES2533521	Page	: 1 of 36
Amendment	: 2		
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	: ACT_0021_PFASOMP_25 / Jervis Bay Range Facility PFAS Ongoing Monitoring Program	Date Samples Received	: 24-Oct-2025 16:30
Order number	: 12626622	Date Analysis Commenced	: 28-Oct-2025
C-O-C number	: ----	Issue Date	: 04-Mar-2026 15:06
Sampler	: AD / AK / ES / LR		
Site	: 0021 Jervis Bay Range Facility		
Quote number	: ES23GHDSE0026_V3		
No. of samples received	: 81		
No. of samples analysed	: 79		



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 Inorganics, Smithfield, NSW
Franco Lentini	LCMS Coordinator	Sydney Inorganics, Smithfield, NSW
Franco Lentini	LCMS Coordinator	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.
- EP231X - Per- and Polyfluoroalkyl Substances (PFAS): Samples received in 20ml or 125ml bottles have been tested in accordance with the QSM5.3 compliant, NATA accredited method. 60mL or 250mL bottles have been tested to the legacy QSM 5.1 aligned, NATA accredited method.
- Amendment (17/02/2026): This report has been amended following the data copy request from ES2533521 sample 059 (0021_SD006_251023) to ES2533521 sample 014 with field ID updated to (0021_SD216_251023)
- Amendment (04/03/2026): This report has been amended to reflect the removal of analysis for samples ES2533521□076 and ES2533521□059. The corresponding data have been reassigned to ES2533465□004 and ES2533465□014, respectively.
- EP231: Stable isotope enriched internal standards are added to samples prior to extraction. Target compounds have a direct analogous internal standard with the exception of PFPeS, PFHpA, PFDS, PFTrDA and 10:2 FTS. These compounds use an internal standard that is chemically related and has a retention time close to that of the target compound. The DQO for internal standard response is 50-150% of that established at initial calibration or as per USEPA 1633 limits where listed. PFOS is quantified using a certified, traceable standard consisting of linear and branched PFOS isomers. These practices are in line with recommendations in the National Environmental Management Plan for PFAS and also conform to QSM 5.4 (US DoD) requirements.



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	0021_SD009_251023	0021_SD011_251022	0021_SD018_251022	0021_SD021_251021	0021_SD035_251021
Sampling date / time					23-Oct-2025 12:00	22-Oct-2025 11:35	22-Oct-2025 10:50	21-Oct-2025 16:54	21-Oct-2025 07:54
Compound	CAS Number	LOR	Unit		ES2533521-060	ES2533521-061	ES2533521-062	ES2533521-063	ES2533521-064
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	-----	0.1	%		4.0	11.9	82.9	63.0	69.5
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg		<0.0002	<0.0002	0.0007	0.0004	<0.0002
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg		0.0016	0.0007	0.0051	0.0016	0.0010
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg		0.0071	0.0019	0.0382	0.0360	0.0076
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg		<0.001	<0.001	<0.001	<0.001	<0.001
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorotridecanoic acid (PFTriDA)	72629-94-8	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg		<0.0005	<0.0005	<0.0006	<0.0005	<0.0005
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				0021_SD009_251023	0021_SD011_251022	0021_SD018_251022	0021_SD021_251021	0021_SD035_251021
Sampling date / time				23-Oct-2025 12:00	22-Oct-2025 11:35	22-Oct-2025 10:50	21-Oct-2025 16:54	21-Oct-2025 07:54
Compound	CAS Number	LOR	Unit	ES2533521-060	ES2533521-061	ES2533521-062	ES2533521-063	ES2533521-064
				Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued								
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	<0.0005	<0.0006	<0.0005	<0.0005
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	<0.0005	<0.0006	<0.0005	<0.0005
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	<0.0005	<0.0006	<0.0005	<0.0005
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	<0.0005	<0.0006	<0.0005	<0.0005
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
EP231P: PFAS Sums								
Sum of PFAS	----	0.0002	mg/kg	0.0087	0.0026	0.0440	0.0380	0.0086
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	0.0087	0.0026	0.0433	0.0376	0.0086
Sum of PFAS (WA DER List)	----	0.0002	mg/kg	0.0087	0.0026	0.0440	0.0380	0.0086
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.0002	%	102	97.7	96.3	106	103
13C8-PFOA	----	0.0002	%	94.6	97.9	91.8	96.3	94.6



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	0021_SD036_251021	0021_SD037_251021	0021_SD040_251021	0021_SD044_251021	0021_SD046_251021
Sampling date / time					21-Oct-2025 09:14	21-Oct-2025 09:59	21-Oct-2025 16:27	21-Oct-2025 08:21	21-Oct-2025 07:52
Compound	CAS Number	LOR	Unit		ES2533521-065	ES2533521-066	ES2533521-067	ES2533521-068	ES2533521-069
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	-----	0.1	%		13.8	21.5	34.0	23.4	24.3
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg		<0.0002	<0.0002	0.0006	<0.0002	<0.0002
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg		0.0015	<0.0002	0.0017	0.0003	<0.0002
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg		<0.001	<0.001	<0.001	<0.001	<0.001
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	0021_SD036_251021	0021_SD037_251021	0021_SD040_251021	0021_SD044_251021	0021_SD046_251021
Sampling date / time					21-Oct-2025 09:14	21-Oct-2025 09:59	21-Oct-2025 16:27	21-Oct-2025 08:21	21-Oct-2025 07:52
Compound	CAS Number	LOR	Unit		ES2533521-065	ES2533521-066	ES2533521-067	ES2533521-068	ES2533521-069
					Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
EP231P: PFAS Sums									
Sum of PFAS	----	0.0002	mg/kg		0.0015	<0.0002	0.0023	0.0003	<0.0002
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg		0.0015	<0.0002	0.0023	0.0003	<0.0002
Sum of PFAS (WA DER List)	----	0.0002	mg/kg		0.0015	<0.0002	0.0023	0.0003	<0.0002
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		99.7	98.4	97.8	92.7	92.6
13C8-PFOA	----	0.0002	%		94.4	95.6	94.4	100	100



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	0021_SD066_251023	0021_SD067_251023	0021_SD068_251023	0021_SD069_251023	0021_SD188_251021
Sampling date / time					23-Oct-2025 09:16	23-Oct-2025 08:59	23-Oct-2025 08:43	23-Oct-2025 08:04	21-Oct-2025 15:03
Compound	CAS Number	LOR	Unit		ES2533521-070	ES2533521-071	ES2533521-072	ES2533521-073	ES2533521-074
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	-----	0.1	%		39.6	77.2	55.1	35.6	21.4
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg		0.0004	<0.0002	0.0006	0.0061	<0.0002
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg		<0.001	<0.001	<0.001	<0.001	<0.001
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	0021_SD066_251023	0021_SD067_251023	0021_SD068_251023	0021_SD069_251023	0021_SD188_251021
Sampling date / time					23-Oct-2025 09:16	23-Oct-2025 08:59	23-Oct-2025 08:43	23-Oct-2025 08:04	21-Oct-2025 15:03
Compound	CAS Number	LOR	Unit		ES2533521-070	ES2533521-071	ES2533521-072	ES2533521-073	ES2533521-074
					Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
EP231P: PFAS Sums									
Sum of PFAS	----	0.0002	mg/kg		0.0004	<0.0002	0.0006	0.0061	<0.0002
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg		0.0004	<0.0002	0.0006	0.0061	<0.0002
Sum of PFAS (WA DER List)	----	0.0002	mg/kg		0.0004	<0.0002	0.0006	0.0061	<0.0002
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		96.9	95.4	108	89.3	99.8
13C8-PFOA	----	0.0002	%		97.8	90.0	98.4	94.4	96.6



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				0021_MW018_251021	0021_MW020_251021	0021_MW021_251021	0021_MW022_251023	0021_MW026_251021
Sampling date / time				21-Oct-2025 16:49	21-Oct-2025 15:24	21-Oct-2025 14:48	23-Oct-2025 15:06	21-Oct-2025 13:51
Compound	CAS Number	LOR	Unit	ES2533521-001	ES2533521-002	ES2533521-003	ES2533521-004	ES2533521-005
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	<0.02	0.03	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	0.11	<0.01	<0.01	0.59	<0.01
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	<0.02	0.06	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	0.03	<0.01	<0.01	0.65	<0.01
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	<0.02	0.04	<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	<0.01	0.04	<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

				0021_MW018_251021	0021_MW020_251021	0021_MW021_251021	0021_MW022_251023	0021_MW026_251021
Sampling date / time				21-Oct-2025 16:49	21-Oct-2025 15:24	21-Oct-2025 14:48	23-Oct-2025 15:06	21-Oct-2025 13:51
Compound	CAS Number	LOR	Unit	ES2533521-001	ES2533521-002	ES2533521-003	ES2533521-004	ES2533521-005
				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	0.16	<0.01	<0.01	1.41	<0.01
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	0.14	<0.01	<0.01	1.24	<0.01
Sum of PFAS (WA DER List)	----	0.01	µg/L	0.16	<0.01	<0.01	1.32	<0.01
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	93.2	98.4	88.4	90.2	97.1
13C8-PFOA	----	0.02	%	93.6	92.2	92.7	94.2	94.5



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				0021_MW028_251021	0021_MW030_251022	0021_MW060_251023	0021_MW061_251023	0021_MW062_251022
Sampling date / time				21-Oct-2025 10:59	22-Oct-2025 14:51	23-Oct-2025 13:57	23-Oct-2025 13:25	22-Oct-2025 15:18
Compound	CAS Number	LOR	Unit	ES2533521-006	ES2533521-007	ES2533521-008	ES2533521-009	ES2533521-010
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	<0.02	0.08	0.40
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	<0.02	0.11	0.71
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	0.04	<0.01	0.02	1.52	11.0
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	<0.02	0.09	0.93
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	0.03	<0.01	0.06	4.29	38.9
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	0.08
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	0.2
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	<0.02	0.06	0.38
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	<0.02	0.32	2.49
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	<0.02	0.05	0.50
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	<0.01	0.09	0.88
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	0.06
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	0.04
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

				0021_MW028_251021	0021_MW030_251022	0021_MW060_251023	0021_MW061_251023	0021_MW062_251022
Sampling date / time				21-Oct-2025 10:59	22-Oct-2025 14:51	23-Oct-2025 13:57	23-Oct-2025 13:25	22-Oct-2025 15:18
Compound	CAS Number	LOR	Unit	ES2533521-006	ES2533521-007	ES2533521-008	ES2533521-009	ES2533521-010
				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	0.07	<0.01	0.08	6.66	57.1
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	0.07	<0.01	0.08	5.81	49.9
Sum of PFAS (WA DER List)	----	0.01	µg/L	0.07	<0.01	0.08	6.41	54.8
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	88.2	91.9	88.9	91.2	102
13C8-PFOA	----	0.02	%	94.8	94.2	92.6	94.4	90.1



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				0021_MW063_251022	0021_MW064_251022	0021_MW065_251022	0021_MW070_251023	0021_MW071_251023
Sampling date / time				22-Oct-2025 10:52	22-Oct-2025 14:15	22-Oct-2025 15:06	23-Oct-2025 12:25	23-Oct-2025 13:31
Compound	CAS Number	LOR	Unit	ES2533521-011	ES2533521-012	ES2533521-013	ES2533521-014	ES2533521-015
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	0.05	0.08	0.04	0.11	0.11
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	0.08	0.10	0.05	0.20	0.18
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	1.03	0.32	0.32	2.91	1.41
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	0.07	<0.02	<0.02	0.45	0.06
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	2.30	0.28	0.25	26.2	1.76
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	0.04	0.05	0.04
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	0.09	0.06	0.17	0.30	0.22
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	<0.02	0.05	0.03
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	0.06	<0.01	0.02	0.20	0.06
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

				0021_MW063_251022	0021_MW064_251022	0021_MW065_251022	0021_MW070_251023	0021_MW071_251023
Sampling date / time				22-Oct-2025 10:52	22-Oct-2025 14:15	22-Oct-2025 15:06	23-Oct-2025 12:25	23-Oct-2025 13:31
Compound	CAS Number	LOR	Unit	ES2533521-011	ES2533521-012	ES2533521-013	ES2533521-014	ES2533521-015
				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	3.68	0.89	0.89	30.6	3.92
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	3.33	0.60	0.57	29.1	3.17
Sum of PFAS (WA DER List)	----	0.01	µg/L	3.53	0.74	0.84	29.8	3.63
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	92.8	96.2	98.2	88.5	92.7
13C8-PFOA	----	0.02	%	91.0	93.5	95.2	91.0	92.4



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				0021_MW072_251023	0021_MW101_251023	0021_MW102_251022	0021_MW103_251022	0021_MW105_251023
Sampling date / time				23-Oct-2025 11:39	23-Oct-2025 11:58	22-Oct-2025 16:02	22-Oct-2025 12:06	23-Oct-2025 08:49
Compound	CAS Number	LOR	Unit	ES2533521-016	ES2533521-017	ES2533521-018	ES2533521-019	ES2533521-020
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	0.22	<0.02	0.47	3.86	0.08
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	0.52	<0.02	0.63	5.96	0.19
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	6.69	0.13	5.70	50.2	3.60
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	0.72	<0.02	0.50	3.49	0.20
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	18.4	0.18	7.98	50.8	18.0
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	<0.02	0.03	<0.02
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.1	0.5	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	0.09	<0.02	0.20	1.33	0.08
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	0.62	<0.02	1.28	9.56	0.57
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	0.12	<0.02	0.20	1.54	0.07
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	0.54	<0.01	0.36	2.79	0.16
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	<0.02	0.04	<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

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_MW072_251023	0021_MW101_251023	0021_MW102_251022	0021_MW103_251022	0021_MW105_251023
Sampling date / time				23-Oct-2025 11:39	23-Oct-2025 11:58	22-Oct-2025 16:02	22-Oct-2025 12:06	23-Oct-2025 08:49	
Compound	CAS Number	LOR	Unit	ES2533521-016	ES2533521-017	ES2533521-018	ES2533521-019	ES2533521-020	
				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	28.0	0.31	17.6	132	23.3	
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	25.1	0.31	13.7	101	21.6	
Sum of PFAS (WA DER List)	----	0.01	µg/L	26.7	0.31	16.3	120	22.6	
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%	89.3	91.5	93.9	93.4	105	
13C8-PFOA	----	0.02	%	90.9	93.5	89.8	94.7	91.7	



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				0021_MW106_251022	0021_MW107_251023	0021_MW108_251023	0021_MW109_251022	0021_MW110_251023
Sampling date / time				22-Oct-2025 15:06	23-Oct-2025 09:50	23-Oct-2025 11:27	22-Oct-2025 15:58	23-Oct-2025 14:37
Compound	CAS Number	LOR	Unit	ES2533521-021	ES2533521-022	ES2533521-023	ES2533521-024	ES2533521-025
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	0.59	0.15	0.15	0.03	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	2.52	0.21	0.22	0.06	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	27.6	2.62	2.91	0.64	0.03
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	2.77	0.12	0.12	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	67.9	1.93	3.80	0.64	<0.01
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	0.05	<0.02	<0.02	<0.02	<0.02
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	0.2	0.1	<0.1	<0.1	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	0.48	0.09	0.08	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	4.23	0.42	0.43	0.15	<0.02
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	0.52	0.06	0.06	<0.02	<0.02
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	2.50	0.13	0.12	0.02	<0.01
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	0.03	<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

				0021_MW106_251022	0021_MW107_251023	0021_MW108_251023	0021_MW109_251022	0021_MW110_251023
Sampling date / time				22-Oct-2025 15:06	23-Oct-2025 09:50	23-Oct-2025 11:27	22-Oct-2025 15:58	23-Oct-2025 14:37
Compound	CAS Number	LOR	Unit	ES2533521-021	ES2533521-022	ES2533521-023	ES2533521-024	ES2533521-025
				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	110	5.89	7.92	1.54	0.03
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	95.5	4.55	6.71	1.28	0.03
Sum of PFAS (WA DER List)	----	0.01	µg/L	104	5.50	7.55	1.48	0.03
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	87.7	94.7	93.2	83.0	92.2
13C8-PFOA	----	0.02	%	94.3	90.3	94.4	95.1	89.6



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				0021_MW111_251023	0021_MW112_251023	0021_MW117_251021	0021_MW118_251021	0021_MW119_251021
Sampling date / time				23-Oct-2025 13:37	23-Oct-2025 15:07	21-Oct-2025 11:34	21-Oct-2025 11:45	21-Oct-2025 09:15
Compound	CAS Number	LOR	Unit	ES2533521-026	ES2533521-027	ES2533521-028	ES2533521-029	ES2533521-030
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	<0.02	0.04	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	0.01	<0.01	0.10	0.50	<0.01
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	0.04	0.44	<0.01
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	<0.02	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	<0.01	<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

				0021_MW111_251023	0021_MW112_251023	0021_MW117_251021	0021_MW118_251021	0021_MW119_251021
Sampling date / time				23-Oct-2025 13:37	23-Oct-2025 15:07	21-Oct-2025 11:34	21-Oct-2025 11:45	21-Oct-2025 09:15
Compound	CAS Number	LOR	Unit	ES2533521-026	ES2533521-027	ES2533521-028	ES2533521-029	ES2533521-030
				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	0.01	<0.01	0.14	1.00	<0.01
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	0.01	<0.01	0.14	0.94	<0.01
Sum of PFAS (WA DER List)	----	0.01	µg/L	0.01	<0.01	0.14	0.96	<0.01
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	91.8	94.4	92.3	94.6	91.7
13C8-PFOA	----	0.02	%	98.4	94.1	92.2	94.7	97.3



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				0021_MW120_251021	0021_MW121_251022	0021_MW123_251021	0021_MW124_251023	0021_MW125_251022
Sampling date / time				21-Oct-2025 09:45	22-Oct-2025 12:27	21-Oct-2025 16:15	23-Oct-2025 11:32	22-Oct-2025 09:27
Compound	CAS Number	LOR	Unit	ES2533521-031	ES2533521-032	ES2533521-033	ES2533521-034	ES2533521-035
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	0.06	0.03	0.04	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	0.08	0.04	0.10	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	0.52	0.48	0.73	0.17	0.09
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.11	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	0.26	0.03	0.89	0.38	0.04
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	0.07	0.03	0.10	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	0.07	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

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_MW120_251021	0021_MW121_251022	0021_MW123_251021	0021_MW124_251023	0021_MW125_251022
Sampling date / time				21-Oct-2025 09:45	22-Oct-2025 12:27	21-Oct-2025 16:15	23-Oct-2025 11:32	22-Oct-2025 09:27	
Compound	CAS Number	LOR	Unit	ES2533521-031	ES2533521-032	ES2533521-033	ES2533521-034	ES2533521-035	
				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	1.02	0.61	2.08	0.58	0.13	
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	0.78	0.51	1.62	0.55	0.13	
Sum of PFAS (WA DER List)	----	0.01	µg/L	0.92	0.57	1.87	0.58	0.13	
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%	93.5	88.5	90.5	97.7	88.8	
13C8-PFOA	----	0.02	%	92.0	93.1	92.3	97.0	93.0	



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				0021_MW126_251022	0021_MW127_251022	0021_MW128_251021	0021_MW129_251021	0021_MW130_251021
Sampling date / time				22-Oct-2025 10:33	22-Oct-2025 13:44	21-Oct-2025 16:45	21-Oct-2025 13:13	21-Oct-2025 15:52
Compound	CAS Number	LOR	Unit	ES2533521-036	ES2533521-037	ES2533521-038	ES2533521-039	ES2533521-040
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.05	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.06	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.40	0.05	<0.01	<0.01
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.22	<0.01	<0.01	<0.01
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	0.08	<0.02	<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	0.02	<0.01	<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

				0021_MW126_251022	0021_MW127_251022	0021_MW128_251021	0021_MW129_251021	0021_MW130_251021
Sampling date / time				22-Oct-2025 10:33	22-Oct-2025 13:44	21-Oct-2025 16:45	21-Oct-2025 13:13	21-Oct-2025 15:52
Compound	CAS Number	LOR	Unit	ES2533521-036	ES2533521-037	ES2533521-038	ES2533521-039	ES2533521-040
				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	<0.01	0.83	0.05	<0.01	<0.01
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	0.62	0.05	<0.01	<0.01
Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	0.77	0.05	<0.01	<0.01
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	88.6	99.3	95.2	90.4	91.8
13C8-PFOA	----	0.02	%	91.4	90.8	93.8	94.1	90.6



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				0021_MW131_251021	0021_MW132_251021	0021_MW133_251021	0021_MW134_251022	0021_MW135_251022
Sampling date / time				21-Oct-2025 08:36	21-Oct-2025 10:51	21-Oct-2025 10:55	22-Oct-2025 15:46	22-Oct-2025 11:34
Compound	CAS Number	LOR	Unit	ES2533521-041	ES2533521-042	ES2533521-043	ES2533521-044	ES2533521-045
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	0.08	<0.01	<0.01	<0.01	<0.01
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	0.05	<0.01	<0.01	<0.01	<0.01
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	<0.02	<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	<0.01	<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

				0021_MW131_251021	0021_MW132_251021	0021_MW133_251021	0021_MW134_251022	0021_MW135_251022
Sampling date / time				21-Oct-2025 08:36	21-Oct-2025 10:51	21-Oct-2025 10:55	22-Oct-2025 15:46	22-Oct-2025 11:34
Compound	CAS Number	LOR	Unit	ES2533521-041	ES2533521-042	ES2533521-043	ES2533521-044	ES2533521-045
				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	0.13	<0.01	<0.01	<0.01	<0.01
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	0.13	<0.01	<0.01	<0.01	<0.01
Sum of PFAS (WA DER List)	----	0.01	µg/L	0.13	<0.01	<0.01	<0.01	<0.01
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	93.4	90.4	98.0	97.0	98.5
13C8-PFOA	----	0.02	%	95.6	95.0	98.1	94.8	94.2



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				0021_MW136_251022	0021_MW137_251022	0021_MW138_251021	0021_MW139_251021	0021_MW140_251021
Sampling date / time				22-Oct-2025 11:38	22-Oct-2025 12:20	21-Oct-2025 13:09	21-Oct-2025 13:37	21-Oct-2025 12:16
Compound	CAS Number	LOR	Unit	ES2533521-046	ES2533521-047	ES2533521-048	ES2533521-049	ES2533521-050
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
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	<0.02	<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	<0.01	<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

				0021_MW136_251022	0021_MW137_251022	0021_MW138_251021	0021_MW139_251021	0021_MW140_251021
Sampling date / time				22-Oct-2025 11:38	22-Oct-2025 12:20	21-Oct-2025 13:09	21-Oct-2025 13:37	21-Oct-2025 12:16
Compound	CAS Number	LOR	Unit	ES2533521-046	ES2533521-047	ES2533521-048	ES2533521-049	ES2533521-050
				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	<0.01	<0.01	<0.01	<0.01	<0.01
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	93.8	93.8	96.6	95.6	90.6
13C8-PFOA	----	0.02	%	94.8	93.9	93.6	94.9	94.1



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				0021_MW150_251023	0021_MW153_251023	0021_MW160_251021	0021_MW163_251022	0021_MW164_251021
Sampling date / time				23-Oct-2025 08:50	23-Oct-2025 09:46	21-Oct-2025 16:12	22-Oct-2025 08:38	21-Oct-2025 14:32
Compound	CAS Number	LOR	Unit	ES2533521-051	ES2533521-052	ES2533521-053	ES2533521-054	ES2533521-055
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	0.12	0.42	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	0.21	0.74	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	3.48	6.12	<0.01	0.09	0.27
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	0.64	0.84	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	22.2	17.9	<0.01	0.59	2.34
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	0.16	<0.02	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	0.32	0.94	<0.02	0.04	0.02
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	0.05	0.16	<0.02	<0.02	<0.02
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	0.32	0.59	<0.01	<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

				0021_MW150_251023	0021_MW153_251023	0021_MW160_251021	0021_MW163_251022	0021_MW164_251021
Sampling date / time				23-Oct-2025 08:50	23-Oct-2025 09:46	21-Oct-2025 16:12	22-Oct-2025 08:38	21-Oct-2025 14:32
Compound	CAS Number	LOR	Unit	ES2533521-051	ES2533521-052	ES2533521-053	ES2533521-054	ES2533521-055
				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	27.4	28.1	<0.01	0.72	2.89
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	25.7	24.0	<0.01	0.68	2.61
Sum of PFAS (WA DER List)	----	0.01	µg/L	26.6	26.3	<0.01	0.72	2.63
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	95.4	87.3	97.3	95.7	91.7
13C8-PFOA	----	0.02	%	95.1	95.3	93.3	95.3	91.7



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				0021_OTH001_25102 2	0021_OTH002_25102 2	0021_OTH006_25102 2	0021_SW002_251022	0021_SW022_251022
Sampling date / time				22-Oct-2025 14:16	22-Oct-2025 13:39	22-Oct-2025 13:50	22-Oct-2025 09:49	22-Oct-2025 10:50
Compound	CAS Number	LOR	Unit	ES2533521-056	ES2533521-057	ES2533521-058	ES2533521-075	ES2533521-077
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.03	<0.02	0.10	0.03
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.03	<0.02	0.14	0.03
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	0.03	0.28	<0.01	1.46	0.44
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	<0.02	0.08	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	0.05	0.54	<0.01	2.35	0.28
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	<0.02	0.04	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.26	0.03	0.23	0.07
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.02	<0.02	0.03	<0.02
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.06	<0.01	0.07	0.02
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

				0021_OTH001_25102 2	0021_OTH002_25102 2	0021_OTH006_25102 2	0021_SW002_251022	0021_SW022_251022
Sampling date / time				22-Oct-2025 14:16	22-Oct-2025 13:39	22-Oct-2025 13:50	22-Oct-2025 09:49	22-Oct-2025 10:50
Compound	CAS Number	LOR	Unit	ES2533521-056	ES2533521-057	ES2533521-058	ES2533521-075	ES2533521-077
				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	0.08	1.28	0.03	4.54	0.87
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	0.08	0.82	<0.01	3.81	0.72
Sum of PFAS (WA DER List)	----	0.01	µg/L	0.08	1.23	0.03	4.28	0.84
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	94.4	96.0	96.2	95.6	95.1
13C8-PFOA	----	0.02	%	92.8	96.2	93.4	97.2	96.6



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				0021_SW032_251022	0021_SW034_251022	0021_SW037_251021	0021_SW040_251021	----
Sampling date / time				22-Oct-2025 08:48	22-Oct-2025 09:08	21-Oct-2025 13:56	21-Oct-2025 14:23	----
Compound	CAS Number	LOR	Unit	ES2533521-078	ES2533521-079	ES2533521-080	ES2533521-081	-----
				Result	Result	Result	Result	----
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluoropropane sulfonic acid (PFPrS)	423-41-6	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	----
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.002	µg/L	<0.002	<0.002	<0.002	<0.002	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.002	µg/L	<0.002	<0.002	<0.002	<0.002	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.002	µg/L	0.002	0.002	<0.002	<0.002	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.002	µg/L	<0.002	<0.002	<0.002	<0.002	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.002	µg/L	<0.002	0.003	<0.002	<0.002	----
Perfluorononane sulfonic acid (PFNS)	68259-12-1	0.002	µg/L	<0.002	<0.002	<0.002	<0.002	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.002	µg/L	<0.002	<0.002	<0.002	<0.002	----
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.002	µg/L	<0.002	<0.002	<0.002	<0.002	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.002	µg/L	<0.002	<0.002	<0.002	<0.002	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.002	µg/L	<0.002	<0.002	<0.002	<0.002	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.002	µg/L	<0.002	<0.002	<0.002	<0.002	----
Perfluorononanoic acid (PFNA)	375-95-1	0.002	µg/L	<0.002	<0.002	<0.002	<0.002	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.002	µg/L	<0.002	<0.002	<0.002	<0.002	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.002	µg/L	<0.002	<0.002	<0.002	<0.002	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.002	µg/L	<0.002	<0.002	<0.002	<0.002	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.002	µg/L	<0.002	<0.002	<0.002	<0.002	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.005	µg/L	<0.005	<0.005	<0.005	<0.005	----

Sub-Matrix: WATER
(Matrix: WATER)

Sample ID

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_SW032_251022	0021_SW034_251022	0021_SW037_251021	0021_SW040_251021	----
Sampling date / time				22-Oct-2025 08:48	22-Oct-2025 09:08	21-Oct-2025 13:56	21-Oct-2025 14:23	----	
Compound	CAS Number	LOR	Unit	ES2533521-078	ES2533521-079	ES2533521-080	ES2533521-081	-----	
				Result	Result	Result	Result	----	
EP231B: Perfluoroalkyl Carboxylic Acids - Continued									
Perfluorohexadecanoic acid (PFHxDA)	67905-19-5	0.005	µg/L	<0.005	<0.005	<0.005	<0.005	----	
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.002	µg/L	<0.002	<0.002	<0.002	<0.002	----	
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.005	µg/L	<0.005	<0.005	<0.005	<0.005	----	
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.005	µg/L	<0.005	<0.005	<0.005	<0.005	----	
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.005	µg/L	<0.005	<0.005	<0.005	<0.005	----	
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.005	µg/L	<0.005	<0.005	<0.005	<0.005	----	
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.002	µg/L	<0.002	<0.002	<0.002	<0.002	----	
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.002	µg/L	<0.002	<0.002	<0.002	<0.002	----	
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.005	µg/L	<0.005	<0.005	<0.005	<0.005	----	
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.005	µg/L	<0.005	<0.005	<0.005	<0.005	----	
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.005	µg/L	<0.005	<0.005	<0.005	<0.005	----	
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.005	µg/L	<0.005	<0.005	<0.005	<0.005	----	
EP231P: PFAS Sums									
Sum of PFAS	----	0.002	µg/L	0.002	0.005	<0.002	<0.002	----	
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.002	µg/L	0.002	0.005	<0.002	<0.002	----	
Sum of PFAS (WA DER List)	----	0.002	µg/L	0.002	0.005	<0.002	<0.002	----	
EP231S: PFAS Surrogate									



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_SW032_251022	0021_SW034_251022	0021_SW037_251021	0021_SW040_251021	----
Sampling date / time					22-Oct-2025 08:48	22-Oct-2025 09:08	21-Oct-2025 13:56	21-Oct-2025 14:23	----
Compound	CAS Number	LOR	Unit		ES2533521-078	ES2533521-079	ES2533521-080	ES2533521-081	-----
					Result	Result	Result	Result	----
EP231S: PFAS Surrogate - Continued									
13C4-PFOS	----	0.002	%		86.0	86.4	85.9	87.0	----
13C8-PFOA	----	0.002	%		85.9	89.8	92.7	90.5	----



Surrogate Control Limits

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

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 : **ES2533521**

Page : 1 of 27

Amendment : **2**

Client : **GHD PTY LTD**

Contact : **MS HELEN MILNE**

Address : **LEVEL 15, 133 CASTLEREAGH STREET
SYDNEY NSW, AUSTRALIA 2000**

Telephone : **+61 02 9239 7100**

Project : **ACT_0021_PFASOMP_25 / Jervis Bay Range Facility PFAS
Ongoing Monitoring Program**

Order number : **12626622**

C-O-C number : **----**

Sampler : **AD / AK / ES / LR**

Site : **0021 Jervis Bay Range Facility**

Quote number : **ES23GHDSE0026_V3**

No. of samples received : **81**

No. of samples analysed : **79**

Laboratory : **Environmental Division Sydney**

Contact : **Samiksha Sathish**

Address : **277-289 Woodpark Road Smithfield NSW Australia 2164**

Telephone : **+61-2-8784 8555**

Date Samples Received : **24-Oct-2025**

Date Analysis Commenced : **28-Oct-2025**

Issue Date : **04-Mar-2026**



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 Inorganics, Smithfield, NSW
Franco Lentini	LCMS Coordinator	Sydney Inorganics, Smithfield, NSW
Franco Lentini	LCMS Coordinator	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: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 6961092)									
ES2533248-001	Anonymous	EA055: Moisture Content	----	0.1	%	15.1	14.9	1.1	0% - 20%
ES2533380-005	Anonymous	EA055: Moisture Content	----	0.1	%	40.7	43.1	5.8	0% - 20%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 6961093)									
ES2533521-062	0021_SD018_251022	EA055: Moisture Content	----	0.1	%	82.9	79.9	3.7	0% - 20%
ES2533521-070	0021_SD066_251023	EA055: Moisture Content	----	0.1	%	39.6	42.6	7.4	0% - 20%
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 6962652)									
ES2533521-059	0021_SD006_251023	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	0.0026	0.0030	12.2	0% - 50%
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	0.0007	0.0007	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	0.0568	0.0586	3.1	0% - 20%
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
ES2533521-069	0021_SD046_251021	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 6962652)									
ES2533521-059	0021_SD006_251023	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	0.0002	0.0002	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit



Sub-Matrix: SOIL				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: 6962652) - continued									
ES2533521-059	0021_SD006_251023	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	0.0004	0.0005	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDODA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
ES2533521-069	0021_SD046_251021	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDODA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
		EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 6962652)							
ES2533521-059	0021_SD006_251023	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
ES2533521-069	0021_SD046_251021	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit



Sub-Matrix: SOIL				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: 6962652) - continued									
ES2533521-069	0021_SD046_251021	EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 6962652)									
ES2533521-059	0021_SD006_251023	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
ES2533521-069	0021_SD046_251021	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	<0.0005	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: 6960682)									
ES2533521-005	0021_MW026_251021	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	<0.01	<0.01	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
ES2533521-011	0021_MW063_251022	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	1.03	1.02	1.1	0% - 20%
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	2.30	2.31	0.8	0% - 20%
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	0.05	0.05	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	0.08	0.08	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	0.07	0.07	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: 6960682) - continued									
ES2533521-011	0021_MW063_251022	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: 6960683)									
ES2533521-022	0021_MW107_251023	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	2.62	2.94	11.5	0% - 20%
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	1.93	1.89	2.1	0% - 20%
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	0.15	0.16	11.2	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	0.21	0.28	25.7	0% - 50%
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	0.12	0.13	13.3	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
ES2533521-028	0021_MW117_251021	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	0.10	0.11	9.8	0% - 50%
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	0.04	0.04	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: 6961317)									
ES2533521-040	0021_MW130_251021	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	<0.01	<0.01	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
ES2533521-047	0021_MW137_251022	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	<0.01	<0.01	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: 6962278)									
ES2533554-008	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	<0.01	<0.01	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
ES2533536-001	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	0.02	0.02	0.0	No Limit
		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: 6962278) - continued									
ES2533536-001	Anonymous	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: 6963138)									
ES2533521-078	0021_SW032_251022	EP231X-LL: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.002	µg/L	<0.002	<0.002	0.0	No Limit
		EP231X-LL: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.002	µg/L	<0.002	<0.002	0.0	No Limit
		EP231X-LL: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.002	µg/L	0.002	0.002	0.0	No Limit
		EP231X-LL: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.002	µg/L	<0.002	<0.002	0.0	No Limit
		EP231X-LL: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.002	µg/L	<0.002	0.002	0.0	No Limit
		EP231X-LL: Perfluorononane sulfonic acid (PFNS)	68259-12-1	0.002	µg/L	<0.002	<0.002	0.0	No Limit
		EP231X-LL: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.002	µg/L	<0.002	<0.002	0.0	No Limit
		EP231X-LL: Perfluoropropane sulfonic acid (PFPrS)	423-41-6	0.01	µg/L	<0.01	<0.01	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 6960682)									
ES2533521-005	0021_MW026_251021	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
ES2533521-011	0021_MW063_251022	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	0.06	0.06	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	0.09	0.09	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



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: 6960682) - continued									
ES2533521-011	0021_MW063_251022	EP231X: Perfluorotridecanoic acid (PFTTrDA)	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: 6960683)									
ES2533521-022	0021_MW107_251023	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	0.13	0.14	10.1	0% - 50%
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	0.09	0.09	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	0.42	0.49	14.4	0% - 20%
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	0.06	0.06	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 (PFTTrDA)	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
ES2533521-028	0021_MW117_251021	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 (PFTTrDA)	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: 6961317)									
ES2533521-040	0021_MW130_251021	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 (PFTTrDA)	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: 6961317) - continued									
ES2533521-040	0021_MW130_251021	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
ES2533521-047	0021_MW137_251022	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 (PFTTrDA)	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: 6962278)									
ES2533554-008	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 (PFTTrDA)	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		
ES2533536-001	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 (PFTTrDA)	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: 6963138)									
ES2533521-078	0021_SW032_251022	EP231X-LL: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.002	µg/L	<0.002	<0.002	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: 6963138) - continued									
ES2533521-078	0021_SW032_251022	EP231X-LL: Perfluorohexanoic acid (PFHxA)	307-24-4	0.002	µg/L	<0.002	<0.002	0.0	No Limit
		EP231X-LL: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.002	µg/L	<0.002	<0.002	0.0	No Limit
		EP231X-LL: Perfluorooctanoic acid (PFOA)	335-67-1	0.002	µg/L	<0.002	<0.002	0.0	No Limit
		EP231X-LL: Perfluorononanoic acid (PFNA)	375-95-1	0.002	µg/L	<0.002	<0.002	0.0	No Limit
		EP231X-LL: Perfluorodecanoic acid (PFDA)	335-76-2	0.002	µg/L	<0.002	<0.002	0.0	No Limit
		EP231X-LL: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.002	µg/L	<0.002	<0.002	0.0	No Limit
		EP231X-LL: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.002	µg/L	<0.002	<0.002	0.0	No Limit
		EP231X-LL: Perfluorotridecanoic acid (PFTTrDA)	72629-94-8	0.002	µg/L	<0.002	<0.002	0.0	No Limit
		EP231X-LL: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.005	µg/L	<0.005	<0.005	0.0	No Limit
		EP231X-LL: Perfluorohexadecanoic acid (PFHxDA)	67905-19-5	0.005	µg/L	<0.005	<0.005	0.0	No Limit
		EP231X-LL: Perfluorobutanoic acid (PFBA)	375-22-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 6960682)									
ES2533521-005	0021_MW026_251021	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
ES2533521-011	0021_MW063_251022	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



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: 6960683)									
ES2533521-022	0021_MW107_251023	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
ES2533521-028	0021_MW117_251021	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: 6961317)									
ES2533521-040	0021_MW130_251021	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
ES2533521-047	0021_MW137_251022	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	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 (%)
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 6961317) - continued									
ES2533521-047	0021_MW137_251022	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: 6962278)									
ES2533554-008	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
ES2533536-001	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: 6963138)									
ES2533521-078	0021_SW032_251022	EP231X-LL: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.002	µg/L	<0.002	<0.002	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 (%)
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 6963138) - continued									
ES2533521-078	0021_SW032_251022	EP231X-LL: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.002	µg/L	<0.002	<0.002	0.0	No Limit
		EP231X-LL: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.002	µg/L	<0.002	<0.002	0.0	No Limit
		EP231X-LL: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.005	µg/L	<0.005	<0.005	0.0	No Limit
		EP231X-LL: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.005	µg/L	<0.005	<0.005	0.0	No Limit
		EP231X-LL: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.005	µg/L	<0.005	<0.005	0.0	No Limit
		EP231X-LL: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.005	µg/L	<0.005	<0.005	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 6960682)									
ES2533521-005	0021_MW026_251021	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
ES2533521-011	0021_MW063_251022	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
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 6960683)									
ES2533521-022	0021_MW107_251023	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
ES2533521-028	0021_MW117_251021	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	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: 6960683) - continued									
ES2533521-028	0021_MW117_251021	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
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 6961317)									
ES2533521-040	0021_MW130_251021	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
ES2533521-047	0021_MW137_251022	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
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 6962278)									
ES2533554-008	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
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
ES2533536-001	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
		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: 6963138)									



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: 6963138) - continued									
ES2533521-078	0021_SW032_251022	EP231X-LL: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.005	µg/L	<0.005	<0.005	0.0	No Limit
		EP231X-LL: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.005	µg/L	<0.005	<0.005	0.0	No Limit
		EP231X-LL: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.005	µg/L	<0.005	<0.005	0.0	No Limit
		EP231X-LL: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.005	µg/L	<0.005	<0.005	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 6960682)									
ES2533521-005	0021_MW026_251021	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
ES2533521-011	0021_MW063_251022	EP231X: Sum of PFAS	----	0.01	µg/L	3.68	3.68	0.0	0% - 20%
EP231P: PFAS Sums (QC Lot: 6960683)									
ES2533521-022	0021_MW107_251023	EP231X: Sum of PFAS	----	0.01	µg/L	5.89	6.24	5.8	0% - 20%
ES2533521-028	0021_MW117_251021	EP231X: Sum of PFAS	----	0.01	µg/L	0.14	0.15	6.9	0% - 50%
EP231P: PFAS Sums (QC Lot: 6961317)									
ES2533521-040	0021_MW130_251021	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
ES2533521-047	0021_MW137_251022	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 6962278)									
ES2533554-008	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
ES2533536-001	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	0.02	0.02	0.0	No Limit

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: SOIL				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%)	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result		LCS	Low	High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6962652)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	0.00125 mg/kg	98.0	72.0	128
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	110	73.0	123
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	98.3	67.0	130
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	124	70.0	132
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	91.6	68.0	136
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	107	59.0	134
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6962652)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	0.00625 mg/kg	98.5	71.0	135
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	96.0	69.0	132
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	97.6	70.0	132
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	96.1	71.0	131
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	104	69.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	106	72.0	129
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	0.00125 mg/kg	102	69.0	133
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	100	64.0	136
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	93.2	69.0	135
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	110	66.0	139
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	89.6	69.0	133
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6962652)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	112	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	0.00312 mg/kg	114	71.6	129
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	104	69.8	131
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	110	68.7	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	112	65.1	134
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	106	63.0	144
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	118	61.0	139
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6962652)								



Sub-Matrix: SOIL				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%) LCS	Acceptable Limits (%) Low High	
Method: Compound	CAS Number	LOR	Unit	Result				
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6962652) - continued								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	0.00125 mg/kg	100.0	62.0	145
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	0.00125 mg/kg	89.8	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	0.00125 mg/kg	112	65.0	137
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	0.00125 mg/kg	134	69.2	143

Sub-Matrix: WATER				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%) LCS	Acceptable Limits (%) Low High	
Method: Compound	CAS Number	LOR	Unit	Result				
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6960682)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.25 µg/L	95.3	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.25 µg/L	97.8	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.25 µg/L	94.8	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	107	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.25 µg/L	96.3	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.25 µg/L	92.5	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6960683)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.25 µg/L	93.5	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.25 µg/L	99.5	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.25 µg/L	97.9	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	107	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.25 µg/L	98.2	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.25 µg/L	96.9	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6961317)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.25 µg/L	92.3	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.25 µg/L	96.4	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.25 µg/L	97.6	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	99.9	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.25 µg/L	99.1	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.25 µg/L	89.6	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6962278)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.25 µg/L	104	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.25 µg/L	101	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.25 µg/L	91.3	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	114	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.25 µg/L	99.1	65.0	140



Sub-Matrix: **WATER**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%) LCS	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result			Low	High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6962278) - continued								
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.25 µg/L	102	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6963138)								
EP231X-LL: Perfluoropropane sulfonic acid (PFPrS)	423-41-6	0.01	µg/L	<0.01	0.025 µg/L	78.2	70.0	130
EP231X-LL: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.002	µg/L	<0.002	0.025 µg/L	80.0	72.0	130
EP231X-LL: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.002	µg/L	<0.002	0.025 µg/L	78.6	71.0	127
EP231X-LL: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.002	µg/L	<0.002	0.025 µg/L	86.1	68.0	131
EP231X-LL: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.002	µg/L	<0.002	0.025 µg/L	91.7	69.0	134
EP231X-LL: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.002	µg/L	<0.002	0.025 µg/L	85.0	65.0	140
EP231X-LL: Perfluorononane sulfonic acid (PFNS)	68259-12-1	0.002	µg/L	<0.002	0.025 µg/L	77.2	70.0	130
EP231X-LL: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.002	µg/L	<0.002	0.025 µg/L	80.7	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6960682)								
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	98.9	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	106	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	106	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	102	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	97.6	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	103	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	91.1	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	96.8	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	84.7	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6960683)								
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	90.7	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	98.2	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	112	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	103	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	99.1	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	106	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	106	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	95.7	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	105	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	88.5	71.0	132



Sub-Matrix: **WATER**

Method: Compound				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%)	Acceptable Limits (%)	
CAS Number	LOR	Unit	Result			LCS	Low	High
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6961317)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	102	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	91.4	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	105	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	105	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	99.4	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	95.0	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	100	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	87.6	72.0	134
EP231X: Perfluorotridecanoic acid (PFTTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	85.9	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	85.4	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6962278)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	104	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	107	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	114	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	104	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	108	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	113	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	103	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	112	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	115	72.0	134
EP231X: Perfluorotridecanoic acid (PFTTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	116	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	113	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6963138)								
EP231X-LL: Perfluorobutanoic acid (PFBA)	375-22-4	0.01	µg/L	<0.01	0.125 µg/L	90.9	73.0	129
EP231X-LL: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.002	µg/L	<0.002	0.025 µg/L	97.1	72.0	129
EP231X-LL: Perfluorohexanoic acid (PFHxA)	307-24-4	0.002	µg/L	<0.002	0.025 µg/L	93.0	72.0	129
EP231X-LL: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.002	µg/L	<0.002	0.025 µg/L	96.6	72.0	130
EP231X-LL: Perfluorooctanoic acid (PFOA)	335-67-1	0.002	µg/L	<0.002	0.025 µg/L	91.8	71.0	133
EP231X-LL: Perfluorononanoic acid (PFNA)	375-95-1	0.002	µg/L	<0.002	0.025 µg/L	83.1	69.0	130
EP231X-LL: Perfluorodecanoic acid (PFDA)	335-76-2	0.002	µg/L	<0.002	0.025 µg/L	87.5	71.0	129
EP231X-LL: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.002	µg/L	<0.002	0.025 µg/L	102	69.0	133
EP231X-LL: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.002	µg/L	<0.002	0.025 µg/L	76.5	72.0	134
EP231X-LL: Perfluorotridecanoic acid (PFTTrDA)	72629-94-8	0.002	µg/L	<0.002	0.025 µg/L	99.1	65.0	144



Sub-Matrix: **WATER**

Sub-Matrix: WATER				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%) LCS	Acceptable Limits (%) Low High	
Method: Compound	CAS Number	LOR	Unit	Result				
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6963138) - continued								
EP231X-LL: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.005	µg/L	<0.005	0.0625 µg/L	88.7	71.0	132
EP231X-LL: Perfluorohexadecanoic acid (PFHxDA)	67905-19-5	0.005	µg/L	<0.005	0.025 µg/L	100	65.6	133
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6960682)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	117	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	101	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	96.9	62.6	147
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	113	66.0	145
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	110	57.6	145
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	92.6	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	102	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6960683)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	118	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	103	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	112	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	111	57.6	145
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	96.9	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	114	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6961317)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	114	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	111	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	110	62.6	147
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	116	66.0	145
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	123	57.6	145
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	97.5	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	96.7	61.0	135



Sub-Matrix: **WATER**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%) LCS	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result			Low	High
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6962278)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	97.9	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	103	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	106	62.6	147
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	124	66.0	145
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	123	57.6	145
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	113	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	102	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6963138)								
EP231X-LL: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.002	µg/L	<0.002	0.025 µg/L	95.1	67.0	137
EP231X-LL: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.005	µg/L	<0.005	0.0625 µg/L	100	68.0	141
EP231X-LL: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.005	µg/L	<0.005	0.0625 µg/L	95.8	61.1	139
EP231X-LL: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.005	µg/L	<0.005	0.0625 µg/L	99.0	72.3	128
EP231X-LL: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.005	µg/L	<0.005	0.0625 µg/L	106	63.2	134
EP231X-LL: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.002	µg/L	<0.002	0.025 µg/L	82.9	65.0	136
EP231X-LL: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.002	µg/L	<0.002	0.025 µg/L	99.9	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6960682)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.25 µg/L	112	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	81.5	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	98.6	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	94.6	71.4	144
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6960683)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.25 µg/L	108	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	96.7	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	107	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	98.4	71.4	144
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6961317)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.25 µg/L	100	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	95.1	64.0	140



Sub-Matrix: **WATER**

Sub-Matrix: WATER				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%) LCS	Acceptable Limits (%) Low High	
Method: Compound	CAS Number	LOR	Unit	Result				
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6961317) - continued								
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.25 µg/L	94.2	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	93.9	71.4	144
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6962278)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.25 µg/L	105	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	112	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	119	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	102	71.4	144
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6963138)								
EP231X-LL: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.005	µg/L	<0.005	0.025 µg/L	108	63.0	143
EP231X-LL: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.005	µg/L	<0.005	0.025 µg/L	102	64.0	140
EP231X-LL: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.005	µg/L	<0.005	0.025 µg/L	101	67.0	138
EP231X-LL: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.005	µg/L	<0.005	0.025 µg/L	85.2	75.2	137

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: **SOIL**

Sub-Matrix: SOIL				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6962652)							
ES2533521-059	0021_SD006_251023	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.00125 mg/kg	93.0	72.0	128
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.00125 mg/kg	87.3	73.0	123
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.00125 mg/kg	68.8	67.0	130
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.00125 mg/kg	85.6	70.0	132
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.00125 mg/kg	# Not Determined	68.0	136
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.00125 mg/kg	112	59.0	134
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6962652)							
ES2533521-059	0021_SD006_251023	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.00625 mg/kg	87.8	71.0	135
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.00125 mg/kg	79.8	69.0	132
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.00125 mg/kg	88.3	70.0	132
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.00125 mg/kg	82.4	71.0	131
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.00125 mg/kg	105	69.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.00125 mg/kg	91.6	72.0	129
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.00125 mg/kg	88.1	69.0	133
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.00125 mg/kg	89.3	64.0	136



Sub-Matrix: SOIL				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: 6962652) - continued							
ES2533521-059	0021_SD006_251023	EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.00125 mg/kg	77.3	69.0	135
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.00125 mg/kg	78.6	66.0	139
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.00312 mg/kg	85.9	69.0	133
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6962652)							
ES2533521-059	0021_SD006_251023	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.00125 mg/kg	84.0	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.00312 mg/kg	125	71.6	129
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.00312 mg/kg	117	69.8	131
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.00312 mg/kg	117	68.7	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.00312 mg/kg	125	65.1	134
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.00125 mg/kg	119	63.0	144
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.00125 mg/kg	115	61.0	139
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6962652)							
ES2533521-059	0021_SD006_251023	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.00125 mg/kg	92.8	62.0	145
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.00125 mg/kg	118	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.00125 mg/kg	124	65.0	137
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.00125 mg/kg	102	69.2	143

Sub-Matrix: WATER				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6960682)							
ES2533521-010	0021_MW062_251022	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.25 µg/L	113	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.25 µg/L	123	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	111	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	85.7	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6960683)							
ES2533521-024	0021_MW109_251022	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.25 µg/L	93.7	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	76.2	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.25 µg/L	105	69.0	134



Sub-Matrix: **WATER**

Sub-Matrix: WATER				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6960683) - continued							
ES2533521-024	0021_MW109_251022	EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.25 µg/L	108	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.25 µg/L	98.9	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6961317)							
ES2533521-041	0021_MW131_251021	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.25 µg/L	94.9	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	94.8	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.25 µg/L	109	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.25 µg/L	96.7	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.25 µg/L	90.9	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6962278)							
ES2533597-001	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.25 µg/L	102	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.25 µg/L	101	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.25 µg/L	96.0	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	96.6	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.25 µg/L	102	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6963138)							
ES2533521-079	0021_SW034_251022	EP231X-LL: Perfluoropropane sulfonic acid (PFPrS)	423-41-6	0.025 µg/L	76.3	70.0	130
		EP231X-LL: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.025 µg/L	80.3	72.0	130
		EP231X-LL: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.025 µg/L	91.2	71.0	127
		EP231X-LL: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.025 µg/L	91.5	68.0	131
		EP231X-LL: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.025 µg/L	98.5	69.0	134
		EP231X-LL: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.025 µg/L	94.3	65.0	140
		EP231X-LL: Perfluorononane sulfonic acid (PFNS)	68259-12-1	0.025 µg/L	85.1	70.0	130
		EP231X-LL: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.025 µg/L	73.0	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6960682)							
ES2533521-010	0021_MW062_251022	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	91.8	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	79.7	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	# Not Determined	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	83.1	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	132	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	103	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	96.8	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	107	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	94.2	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTTrDA)	72629-94-8	0.25 µg/L	103	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	86.6	71.0	132



Sub-Matrix: **WATER**

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: 6960683)							
ES2533521-024	0021_MW109_251022	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	97.2	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	90.7	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	95.5	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	98.2	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	98.8	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	97.2	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	97.3	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	104	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	94.6	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	101	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	97.3	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6961317)							
ES2533521-041	0021_MW131_251021	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	99.9	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	96.2	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	105	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	108	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	105	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	100	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	98.9	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	109	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	101	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	93.9	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	98.8	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6962278)							
ES2533597-001	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	101	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	103	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	109	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	103	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	102	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	108	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	103	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	117	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	108	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	114	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6963138)							
ES2533521-079	0021_SW034_251022	EP231X-LL: Perfluorobutanoic acid (PFBA)	375-22-4	0.125 µg/L	96.1	73.0	129
		EP231X-LL: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.025 µg/L	112	72.0	129



Sub-Matrix: **WATER**

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: 6963138) - continued							
ES2533521-079	0021_SW034_251022	EP231X-LL: Perfluorohexanoic acid (PFHxA)	307-24-4	0.025 µg/L	98.8	72.0	129
		EP231X-LL: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.025 µg/L	102	72.0	130
		EP231X-LL: Perfluorooctanoic acid (PFOA)	335-67-1	0.025 µg/L	104	71.0	133
		EP231X-LL: Perfluorononanoic acid (PFNA)	375-95-1	0.025 µg/L	92.2	69.0	130
		EP231X-LL: Perfluorodecanoic acid (PFDA)	335-76-2	0.025 µg/L	91.0	71.0	129
		EP231X-LL: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.025 µg/L	108	69.0	133
		EP231X-LL: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.025 µg/L	78.6	72.0	134
		EP231X-LL: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.025 µg/L	105	65.0	144
		EP231X-LL: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0625 µg/L	97.7	71.0	132
		EP231X-LL: Perfluorohexadecanoic acid (PFHxDA)	67905-19-5	0.025 µg/L	113	65.6	133
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6960682)							
ES2533521-010	0021_MW062_251022	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	107	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	110	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	112	62.6	147
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	114	66.0	145
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	109	57.6	145
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	87.6	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	95.7	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6960683)							
ES2533521-024	0021_MW109_251022	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	106	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	92.8	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	97.7	62.6	147
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	105	66.0	145
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	110	57.6	145
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	92.2	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	109	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6961317)							
ES2533521-041	0021_MW131_251021	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	105	67.0	137

Sub-Matrix: WATER

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: 6961317) - continued							
ES2533521-041	0021_MW131_251021	EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	125	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	108	62.6	147
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	110	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	109	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	102	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6962278)							
ES2533597-001	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	93.9	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	101	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	102	62.6	147
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	124	66.0	145
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	113	57.6	145
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	109	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	103	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6963138)							
ES2533521-079	0021_SW034_251022	EP231X-LL: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.025 µg/L	101	67.0	137
		EP231X-LL: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0625 µg/L	108	68.0	141
		EP231X-LL: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0625 µg/L	108	61.1	139
		EP231X-LL: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0625 µg/L	111	72.3	128
		EP231X-LL: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0625 µg/L	114	63.2	134
		EP231X-LL: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.025 µg/L	86.2	65.0	136
		EP231X-LL: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.025 µg/L	102	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6960682)							



Sub-Matrix: **WATER**

Sub-Matrix: WATER				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6960682) - continued							
ES2533521-010	0021_MW062_251022	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.25 µg/L	106	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.25 µg/L	102	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.25 µg/L	94.4	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.25 µg/L	95.7	71.4	144
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6960683)							
ES2533521-024	0021_MW109_251022	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.25 µg/L	96.6	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.25 µg/L	96.9	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.25 µg/L	101	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.25 µg/L	101	71.4	144
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6961317)							
ES2533521-041	0021_MW131_251021	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.25 µg/L	102	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.25 µg/L	95.9	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.25 µg/L	94.8	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.25 µg/L	77.5	71.4	144
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6962278)							
ES2533597-001	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.25 µg/L	105	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.25 µg/L	102	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.25 µg/L	117	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.25 µg/L	112	71.4	144
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6963138)							
ES2533521-079	0021_SW034_251022	EP231X-LL: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.025 µg/L	122	63.0	143
		EP231X-LL: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.025 µg/L	114	64.0	140
		EP231X-LL: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.025 µg/L	107	67.0	138
		EP231X-LL: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.025 µg/L	95.6	75.2	137



QA/QC Compliance Assessment to assist with Quality Review

Work Order	: ES2533521	Page	: 1 of 11
Amendment	: 2		
Client	: GHD PTY LTD	Laboratory	: Environmental Division Sydney
Contact	: MS HELEN MILNE	Telephone	: +61-2-8784 8555
Project	: ACT_0021_PFASOMP_25 / Jervis Bay Range Facility PFAS Ongoing Monitoring Program	Date Samples Received	: 24-Oct-2025
Site	: 0021 Jervis Bay Range Facility	Issue Date	: 04-Mar-2026
Sampler	: AD / AK / ES / LR	No. of samples received	: 81
Order number	: 12626622	No. of samples analysed	: 79

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: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Matrix Spike (MS) Recoveries							
EP231A: Perfluoroalkyl Sulfonic Acids	ES2533521--059	0021_SD006_251023	Perfluorooctane sulfonic acid (PFOS)	1763-23-1	Not Determined	----	MS recovery not determined, background level greater than or equal to 4x spike level.

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	ES2533521--010	0021_MW062_251022	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	ES2533521--010	0021_MW062_251022	Perfluorooctane sulfonic acid (PFOS)	1763-23-1	Not Determined	----	MS recovery not determined, background level greater than or equal to 4x spike level.
EP231B: Perfluoroalkyl Carboxylic Acids	ES2533521--010	0021_MW062_251022	Perfluorohexanoic acid (PFHxA)	307-24-4	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: **SOIL**

Evaluation: ✖ = Holding time breach ; ✔ = Within holding time.

Method	Sample Date	Extraction / Preparation			Analysis			
Container / Client Sample ID(s)		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation	
EA055: Moisture Content (Dried @ 105-110°C)								
HDPE Soil Jar (EA055) 0021_SD021_251021, 0021_SD036_251021, 0021_SD040_251021, 0021_SD046_251021,	0021_SD035_251021, 0021_SD037_251021, 0021_SD044_251021, 0021_SD188_251021	21-Oct-2025	----	----	----	28-Oct-2025	04-Nov-2025	✔
HDPE Soil Jar (EA055) 0021_SD011_251022,	0021_SD018_251022	22-Oct-2025	----	----	----	28-Oct-2025	05-Nov-2025	✔
HDPE Soil Jar (EA055) 0021_SD009_251023, 0021_SD067_251023, 0021_SD069_251023	0021_SD066_251023, 0021_SD068_251023,	23-Oct-2025	----	----	----	28-Oct-2025	06-Nov-2025	✔



Matrix: **SOIL**

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

Method	Sample Date	Extraction / Preparation			Analysis			
Container / Client Sample ID(s)		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation	
EP231A: Perfluoroalkyl Sulfonic Acids								
HDPE Soil Jar (EP231X) 0021_SD021_251021, 0021_SD036_251021, 0021_SD040_251021, 0021_SD046_251021,	0021_SD035_251021, 0021_SD037_251021, 0021_SD044_251021, 0021_SD188_251021	21-Oct-2025	29-Oct-2025	19-Apr-2026	✓	31-Oct-2025	08-Dec-2025	✓
HDPE Soil Jar (EP231X) 0021_SD011_251022,	0021_SD018_251022	22-Oct-2025	29-Oct-2025	20-Apr-2026	✓	31-Oct-2025	08-Dec-2025	✓
HDPE Soil Jar (EP231X) 0021_SD009_251023, 0021_SD067_251023, 0021_SD069_251023	0021_SD066_251023, 0021_SD068_251023,	23-Oct-2025	29-Oct-2025	21-Apr-2026	✓	31-Oct-2025	08-Dec-2025	✓
EP231B: Perfluoroalkyl Carboxylic Acids								
HDPE Soil Jar (EP231X) 0021_SD021_251021, 0021_SD036_251021, 0021_SD040_251021, 0021_SD046_251021,	0021_SD035_251021, 0021_SD037_251021, 0021_SD044_251021, 0021_SD188_251021	21-Oct-2025	29-Oct-2025	19-Apr-2026	✓	31-Oct-2025	08-Dec-2025	✓
HDPE Soil Jar (EP231X) 0021_SD011_251022,	0021_SD018_251022	22-Oct-2025	29-Oct-2025	20-Apr-2026	✓	31-Oct-2025	08-Dec-2025	✓
HDPE Soil Jar (EP231X) 0021_SD009_251023, 0021_SD067_251023, 0021_SD069_251023	0021_SD066_251023, 0021_SD068_251023,	23-Oct-2025	29-Oct-2025	21-Apr-2026	✓	31-Oct-2025	08-Dec-2025	✓
EP231C: Perfluoroalkyl Sulfonamides								
HDPE Soil Jar (EP231X) 0021_SD021_251021, 0021_SD036_251021, 0021_SD040_251021, 0021_SD046_251021,	0021_SD035_251021, 0021_SD037_251021, 0021_SD044_251021, 0021_SD188_251021	21-Oct-2025	29-Oct-2025	19-Apr-2026	✓	31-Oct-2025	08-Dec-2025	✓
HDPE Soil Jar (EP231X) 0021_SD011_251022,	0021_SD018_251022	22-Oct-2025	29-Oct-2025	20-Apr-2026	✓	31-Oct-2025	08-Dec-2025	✓
HDPE Soil Jar (EP231X) 0021_SD009_251023, 0021_SD067_251023, 0021_SD069_251023	0021_SD066_251023, 0021_SD068_251023,	23-Oct-2025	29-Oct-2025	21-Apr-2026	✓	31-Oct-2025	08-Dec-2025	✓



Matrix: **SOIL**

Evaluation: ✖ = Holding time breach ; ✔ = Within holding time.

Method	Sample Date	Extraction / Preparation			Analysis			
Container / Client Sample ID(s)		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation	
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
HDPE Soil Jar (EP231X) 0021_SD021_251021, 0021_SD036_251021, 0021_SD040_251021, 0021_SD046_251021,	0021_SD035_251021, 0021_SD037_251021, 0021_SD044_251021, 0021_SD188_251021	21-Oct-2025	29-Oct-2025	19-Apr-2026	✔	31-Oct-2025	08-Dec-2025	✔
HDPE Soil Jar (EP231X) 0021_SD011_251022,	0021_SD018_251022	22-Oct-2025	29-Oct-2025	20-Apr-2026	✔	31-Oct-2025	08-Dec-2025	✔
HDPE Soil Jar (EP231X) 0021_SD009_251023, 0021_SD067_251023, 0021_SD069_251023	0021_SD066_251023, 0021_SD068_251023,	23-Oct-2025	29-Oct-2025	21-Apr-2026	✔	31-Oct-2025	08-Dec-2025	✔
EP231P: PFAS Sums								
HDPE Soil Jar (EP231X) 0021_SD021_251021, 0021_SD036_251021, 0021_SD040_251021, 0021_SD046_251021,	0021_SD035_251021, 0021_SD037_251021, 0021_SD044_251021, 0021_SD188_251021	21-Oct-2025	29-Oct-2025	19-Apr-2026	✔	31-Oct-2025	08-Dec-2025	✔
HDPE Soil Jar (EP231X) 0021_SD011_251022,	0021_SD018_251022	22-Oct-2025	29-Oct-2025	20-Apr-2026	✔	31-Oct-2025	08-Dec-2025	✔
HDPE Soil Jar (EP231X) 0021_SD009_251023, 0021_SD067_251023, 0021_SD069_251023	0021_SD066_251023, 0021_SD068_251023,	23-Oct-2025	29-Oct-2025	21-Apr-2026	✔	31-Oct-2025	08-Dec-2025	✔

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



Matrix: **WATER**

Evaluation: ✖ = Holding time breach ; ✔ = Within holding time.

Method	Sample Date	Extraction / Preparation			Analysis			
Container / Client Sample ID(s)		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation	
EP231A: Perfluoroalkyl Sulfonic Acids								
HDPE (no PTFE) (EP231X) 0021_MW018_251021, 0021_MW021_251021, 0021_MW028_251021	0021_MW020_251021, 0021_MW026_251021,	21-Oct-2025	28-Oct-2025	19-Apr-2026	✔	29-Oct-2025	19-Apr-2026	✔
HDPE (no PTFE) (EP231X-LL) 0021_MW117_251021, 0021_MW119_251021, 0021_MW123_251021, 0021_MW129_251021, 0021_MW131_251021, 0021_MW133_251021, 0021_MW139_251021, 0021_MW160_251021, 0021_SW037_251021,	0021_MW118_251021, 0021_MW120_251021, 0021_MW128_251021, 0021_MW130_251021, 0021_MW132_251021, 0021_MW138_251021, 0021_MW140_251021, 0021_MW164_251021, 0021_SW040_251021	21-Oct-2025	28-Oct-2025	19-Apr-2026	✔	30-Oct-2025	19-Apr-2026	✔
HDPE (no PTFE) (EP231X) 0021_MW030_251022, 0021_MW063_251022, 0021_MW065_251022, 0021_MW103_251022	0021_MW062_251022, 0021_MW064_251022, 0021_MW102_251022,	22-Oct-2025	28-Oct-2025	20-Apr-2026	✔	29-Oct-2025	20-Apr-2026	✔
HDPE (no PTFE) (EP231X-LL) 0021_MW106_251022, 0021_MW121_251022, 0021_MW126_251022, 0021_MW134_251022, 0021_MW136_251022, 0021_MW163_251022, 0021_OTH002_251022, 0021_SW034_251022	0021_MW109_251022, 0021_MW125_251022, 0021_MW127_251022, 0021_MW135_251022, 0021_MW137_251022, 0021_OTH001_251022, 0021_SW032_251022,	22-Oct-2025	28-Oct-2025	20-Apr-2026	✔	30-Oct-2025	20-Apr-2026	✔
HDPE (no PTFE) (EP231X) 0021_OTH006_251022, 0021_SW022_251022	0021_SW002_251022,	22-Oct-2025	28-Oct-2025	20-Apr-2026	✔	31-Oct-2025	20-Apr-2026	✔
HDPE (no PTFE) (EP231X) 0021_MW022_251023, 0021_MW061_251023, 0021_MW071_251023, 0021_MW101_251023	0021_MW060_251023, 0021_MW070_251023, 0021_MW072_251023,	23-Oct-2025	28-Oct-2025	21-Apr-2026	✔	29-Oct-2025	21-Apr-2026	✔
HDPE (no PTFE) (EP231X) 0021_MW105_251023, 0021_MW108_251023, 0021_MW111_251023, 0021_MW124_251023, 0021_MW153_251023	0021_MW107_251023, 0021_MW110_251023, 0021_MW112_251023, 0021_MW150_251023,	23-Oct-2025	28-Oct-2025	21-Apr-2026	✔	30-Oct-2025	21-Apr-2026	✔



Matrix: **WATER**

Evaluation: ✖ = Holding time breach ; ✔ = Within holding time.

Method	Sample Date	Extraction / Preparation			Analysis			
Container / Client Sample ID(s)		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation	
EP231B: Perfluoroalkyl Carboxylic Acids								
HDPE (no PTFE) (EP231X) 0021_MW018_251021, 0021_MW021_251021, 0021_MW028_251021	0021_MW020_251021, 0021_MW026_251021,	21-Oct-2025	28-Oct-2025	19-Apr-2026	✔	29-Oct-2025	19-Apr-2026	✔
HDPE (no PTFE) (EP231X-LL) 0021_MW117_251021, 0021_MW119_251021, 0021_MW123_251021, 0021_MW129_251021, 0021_MW131_251021, 0021_MW133_251021, 0021_MW139_251021, 0021_MW160_251021, 0021_SW037_251021,	0021_MW118_251021, 0021_MW120_251021, 0021_MW128_251021, 0021_MW130_251021, 0021_MW132_251021, 0021_MW138_251021, 0021_MW140_251021, 0021_MW164_251021, 0021_SW040_251021	21-Oct-2025	28-Oct-2025	19-Apr-2026	✔	30-Oct-2025	19-Apr-2026	✔
HDPE (no PTFE) (EP231X) 0021_MW030_251022, 0021_MW063_251022, 0021_MW065_251022, 0021_MW103_251022	0021_MW062_251022, 0021_MW064_251022, 0021_MW102_251022,	22-Oct-2025	28-Oct-2025	20-Apr-2026	✔	29-Oct-2025	20-Apr-2026	✔
HDPE (no PTFE) (EP231X-LL) 0021_MW106_251022, 0021_MW121_251022, 0021_MW126_251022, 0021_MW134_251022, 0021_MW136_251022, 0021_MW163_251022, 0021_OTH002_251022, 0021_SW034_251022	0021_MW109_251022, 0021_MW125_251022, 0021_MW127_251022, 0021_MW135_251022, 0021_MW137_251022, 0021_OTH001_251022, 0021_SW032_251022,	22-Oct-2025	28-Oct-2025	20-Apr-2026	✔	30-Oct-2025	20-Apr-2026	✔
HDPE (no PTFE) (EP231X) 0021_OTH006_251022, 0021_SW022_251022	0021_SW002_251022,	22-Oct-2025	28-Oct-2025	20-Apr-2026	✔	31-Oct-2025	20-Apr-2026	✔
HDPE (no PTFE) (EP231X) 0021_MW022_251023, 0021_MW061_251023, 0021_MW071_251023, 0021_MW101_251023	0021_MW060_251023, 0021_MW070_251023, 0021_MW072_251023,	23-Oct-2025	28-Oct-2025	21-Apr-2026	✔	29-Oct-2025	21-Apr-2026	✔
HDPE (no PTFE) (EP231X) 0021_MW105_251023, 0021_MW108_251023, 0021_MW111_251023, 0021_MW124_251023, 0021_MW153_251023	0021_MW107_251023, 0021_MW110_251023, 0021_MW112_251023, 0021_MW150_251023,	23-Oct-2025	28-Oct-2025	21-Apr-2026	✔	30-Oct-2025	21-Apr-2026	✔



Matrix: **WATER**

Evaluation: ✖ = Holding time breach ; ✔ = Within holding time.

Method	Sample Date	Extraction / Preparation			Analysis			
Container / Client Sample ID(s)		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation	
EP231C: Perfluoroalkyl Sulfonamides								
HDPE (no PTFE) (EP231X) 0021_MW018_251021, 0021_MW021_251021, 0021_MW028_251021	0021_MW020_251021, 0021_MW026_251021,	21-Oct-2025	28-Oct-2025	19-Apr-2026	✔	29-Oct-2025	19-Apr-2026	✔
HDPE (no PTFE) (EP231X-LL) 0021_MW117_251021, 0021_MW119_251021, 0021_MW123_251021, 0021_MW129_251021, 0021_MW131_251021, 0021_MW133_251021, 0021_MW139_251021, 0021_MW160_251021, 0021_SW037_251021,	0021_MW118_251021, 0021_MW120_251021, 0021_MW128_251021, 0021_MW130_251021, 0021_MW132_251021, 0021_MW138_251021, 0021_MW140_251021, 0021_MW164_251021, 0021_SW040_251021	21-Oct-2025	28-Oct-2025	19-Apr-2026	✔	30-Oct-2025	19-Apr-2026	✔
HDPE (no PTFE) (EP231X) 0021_MW030_251022, 0021_MW063_251022, 0021_MW065_251022, 0021_MW103_251022	0021_MW062_251022, 0021_MW064_251022, 0021_MW102_251022,	22-Oct-2025	28-Oct-2025	20-Apr-2026	✔	29-Oct-2025	20-Apr-2026	✔
HDPE (no PTFE) (EP231X-LL) 0021_MW106_251022, 0021_MW121_251022, 0021_MW126_251022, 0021_MW134_251022, 0021_MW136_251022, 0021_MW163_251022, 0021_OTH002_251022, 0021_SW034_251022	0021_MW109_251022, 0021_MW125_251022, 0021_MW127_251022, 0021_MW135_251022, 0021_MW137_251022, 0021_OTH001_251022, 0021_SW032_251022,	22-Oct-2025	28-Oct-2025	20-Apr-2026	✔	30-Oct-2025	20-Apr-2026	✔
HDPE (no PTFE) (EP231X) 0021_OTH006_251022, 0021_SW022_251022	0021_SW002_251022,	22-Oct-2025	28-Oct-2025	20-Apr-2026	✔	31-Oct-2025	20-Apr-2026	✔
HDPE (no PTFE) (EP231X) 0021_MW022_251023, 0021_MW061_251023, 0021_MW071_251023, 0021_MW101_251023	0021_MW060_251023, 0021_MW070_251023, 0021_MW072_251023,	23-Oct-2025	28-Oct-2025	21-Apr-2026	✔	29-Oct-2025	21-Apr-2026	✔
HDPE (no PTFE) (EP231X) 0021_MW105_251023, 0021_MW108_251023, 0021_MW111_251023, 0021_MW124_251023, 0021_MW153_251023	0021_MW107_251023, 0021_MW110_251023, 0021_MW112_251023, 0021_MW150_251023,	23-Oct-2025	28-Oct-2025	21-Apr-2026	✔	30-Oct-2025	21-Apr-2026	✔



Matrix: **WATER**

Evaluation: ✖ = Holding time breach ; ✔ = Within holding time.

Method	Sample Date	Extraction / Preparation			Analysis			
Container / Client Sample ID(s)		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation	
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
HDPE (no PTFE) (EP231X) 0021_MW018_251021, 0021_MW021_251021, 0021_MW028_251021	0021_MW020_251021, 0021_MW026_251021,	21-Oct-2025	28-Oct-2025	19-Apr-2026	✔	29-Oct-2025	19-Apr-2026	✔
HDPE (no PTFE) (EP231X-LL) 0021_MW117_251021, 0021_MW119_251021, 0021_MW123_251021, 0021_MW129_251021, 0021_MW131_251021, 0021_MW133_251021, 0021_MW139_251021, 0021_MW160_251021, 0021_SW037_251021,	0021_MW118_251021, 0021_MW120_251021, 0021_MW128_251021, 0021_MW130_251021, 0021_MW132_251021, 0021_MW138_251021, 0021_MW140_251021, 0021_MW164_251021, 0021_SW040_251021	21-Oct-2025	28-Oct-2025	19-Apr-2026	✔	30-Oct-2025	19-Apr-2026	✔
HDPE (no PTFE) (EP231X) 0021_MW030_251022, 0021_MW063_251022, 0021_MW065_251022, 0021_MW103_251022	0021_MW062_251022, 0021_MW064_251022, 0021_MW102_251022,	22-Oct-2025	28-Oct-2025	20-Apr-2026	✔	29-Oct-2025	20-Apr-2026	✔
HDPE (no PTFE) (EP231X-LL) 0021_MW106_251022, 0021_MW121_251022, 0021_MW126_251022, 0021_MW134_251022, 0021_MW136_251022, 0021_MW163_251022, 0021_OTH002_251022, 0021_SW034_251022	0021_MW109_251022, 0021_MW125_251022, 0021_MW127_251022, 0021_MW135_251022, 0021_MW137_251022, 0021_OTH001_251022, 0021_SW032_251022,	22-Oct-2025	28-Oct-2025	20-Apr-2026	✔	30-Oct-2025	20-Apr-2026	✔
HDPE (no PTFE) (EP231X) 0021_OTH006_251022, 0021_SW022_251022	0021_SW002_251022,	22-Oct-2025	28-Oct-2025	20-Apr-2026	✔	31-Oct-2025	20-Apr-2026	✔
HDPE (no PTFE) (EP231X) 0021_MW022_251023, 0021_MW061_251023, 0021_MW071_251023, 0021_MW101_251023	0021_MW060_251023, 0021_MW070_251023, 0021_MW072_251023,	23-Oct-2025	28-Oct-2025	21-Apr-2026	✔	29-Oct-2025	21-Apr-2026	✔
HDPE (no PTFE) (EP231X) 0021_MW105_251023, 0021_MW108_251023, 0021_MW111_251023, 0021_MW124_251023, 0021_MW153_251023	0021_MW107_251023, 0021_MW110_251023, 0021_MW112_251023, 0021_MW150_251023,	23-Oct-2025	28-Oct-2025	21-Apr-2026	✔	30-Oct-2025	21-Apr-2026	✔



Matrix: **WATER**

Evaluation: ✖ = Holding time breach ; ✔ = Within holding time.

Method	Sample Date	Extraction / Preparation			Analysis			
Container / Client Sample ID(s)		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation	
EP231P: PFAS Sums								
HDPE (no PTFE) (EP231X) 0021_MW018_251021, 0021_MW021_251021, 0021_MW028_251021	0021_MW020_251021, 0021_MW026_251021,	21-Oct-2025	28-Oct-2025	19-Apr-2026	✔	29-Oct-2025	19-Apr-2026	✔
HDPE (no PTFE) (EP231X-LL) 0021_MW117_251021, 0021_MW119_251021, 0021_MW123_251021, 0021_MW129_251021, 0021_MW131_251021, 0021_MW133_251021, 0021_MW139_251021, 0021_MW160_251021, 0021_SW037_251021,	0021_MW118_251021, 0021_MW120_251021, 0021_MW128_251021, 0021_MW130_251021, 0021_MW132_251021, 0021_MW138_251021, 0021_MW140_251021, 0021_MW164_251021, 0021_SW040_251021	21-Oct-2025	28-Oct-2025	19-Apr-2026	✔	30-Oct-2025	19-Apr-2026	✔
HDPE (no PTFE) (EP231X) 0021_MW030_251022, 0021_MW063_251022, 0021_MW065_251022, 0021_MW103_251022	0021_MW062_251022, 0021_MW064_251022, 0021_MW102_251022,	22-Oct-2025	28-Oct-2025	20-Apr-2026	✔	29-Oct-2025	20-Apr-2026	✔
HDPE (no PTFE) (EP231X-LL) 0021_MW106_251022, 0021_MW121_251022, 0021_MW126_251022, 0021_MW134_251022, 0021_MW136_251022, 0021_MW163_251022, 0021_OTH002_251022, 0021_SW034_251022	0021_MW109_251022, 0021_MW125_251022, 0021_MW127_251022, 0021_MW135_251022, 0021_MW137_251022, 0021_OTH001_251022, 0021_SW032_251022,	22-Oct-2025	28-Oct-2025	20-Apr-2026	✔	30-Oct-2025	20-Apr-2026	✔
HDPE (no PTFE) (EP231X) 0021_OTH006_251022, 0021_SW022_251022	0021_SW002_251022,	22-Oct-2025	28-Oct-2025	20-Apr-2026	✔	31-Oct-2025	20-Apr-2026	✔
HDPE (no PTFE) (EP231X) 0021_MW022_251023, 0021_MW061_251023, 0021_MW071_251023, 0021_MW101_251023	0021_MW060_251023, 0021_MW070_251023, 0021_MW072_251023,	23-Oct-2025	28-Oct-2025	21-Apr-2026	✔	29-Oct-2025	21-Apr-2026	✔
HDPE (no PTFE) (EP231X) 0021_MW105_251023, 0021_MW108_251023, 0021_MW111_251023, 0021_MW124_251023, 0021_MW153_251023	0021_MW107_251023, 0021_MW110_251023, 0021_MW112_251023, 0021_MW150_251023,	23-Oct-2025	28-Oct-2025	21-Apr-2026	✔	30-Oct-2025	21-Apr-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: **SOIL**

Evaluation: ✖ = Quality Control frequency not within specification ; ✔ = Quality Control frequency within specification.

Quality Control Sample Type	Method	Count		Rate (%)			Quality Control Specification
Analytical Methods		QC	Regular	Actual	Expected	Evaluation	
Laboratory Duplicates (DUP)							
Moisture Content	EA055	4	38	10.53	10.00	✔	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	17	11.76	10.00	✔	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	17	5.88	5.00	✔	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	17	5.88	5.00	✔	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	17	5.88	5.00	✔	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

Evaluation: ✖ = Quality Control frequency not within specification ; ✔ = Quality Control frequency within specification.

Quality Control Sample Type	Method	Count		Rate (%)			Quality Control Specification
Analytical Methods		QC	Regular	Actual	Expected	Evaluation	
Laboratory Duplicates (DUP)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-LL	1	6	16.67	10.00	✔	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	8	75	10.67	10.00	✔	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-LL	1	6	16.67	5.00	✔	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	4	75	5.33	5.00	✔	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-LL	1	6	16.67	5.00	✔	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	4	75	5.33	5.00	✔	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-LL	1	6	16.67	5.00	✔	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	4	75	5.33	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
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM Schedule B(3).
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	SOIL	In-house: Analysis of soils by solvent extraction followed by negative mode LC-ESI-MS/MS using MRM and isotope dilution or internal standard quantitation. A portion of homogenised sample is extracted along with isotope dilution standards (where commercially available) in a solution of ammonium acetate in acetonitrile/methanol. Where relevant, interferences from co-extracted organics are removed using dispersive clean-up media (dSPE). A portion of extract is combined with an equal volume of reagent water and filtered for instrumental analysis.
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.
Per- and Polyfluoroalkyl Substances (PFAS by LCMSMS	EP231X-LL	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
QuEChERS Extraction of Solids	ORG71	SOIL	In house: Sequential extractions with Acetonitrile/Methanol by shaking. Extraction efficiency aided by the addition of salts under acidic conditions. Where relevant, interferences from co-extracted organics are removed with dispersive clean-up media (dSPE). The extract is either diluted or concentrated and exchanged into the analytical solvent.
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.

Mandatory Fields

CHAIN OF CUSTODY

CLIENT CODE:

PROJECT MANAGER: Helen Milne

*CLIENT: GHD Pty Ltd

MOBILE: 0410 533 325

OFFICE: Sydney

ALS QUOTE # ES23GHDSE0026

PROJECT NO./PROJECT: ACT_0021_PFA5OMP_25 / Jervis Bay Range Facility PFA5 Ongoing Monitoring Program

*INVOICE TO: accounts payable@ghd.com; steven.castillo@ghd.com

*EMAIL REPORTS TO: andrew.duva@ghd.com; drew.morgan@ghd.com; helen.milne@ghd.com; esdat@ghd.au@esdatlabsync.net

REPORTS TO: (default to PM if blank)

Comments:

*STORAGE REQUIREMENTS

Standard Storage time from receipt of samples:

Waters - 3 weeks

Soils - 2 months

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

*TURNAROUND

Standard Storage

Extended Storage

Specify Disposal Date:

3 day (+15%)

2 day (+30%)

1 day (+50%)

*ANALYSIS REQUIRED

Where Vials are required, specify Total (numbered bottles required) or Duplicate (field) (numbered bottles required).

Mark an X in the boxes below analysis to indicate the parameter listed above to be tested on this sample.

INB ALS Data No. and/or Analysis Suite Codes must be listed to attract subsequence price

CC Invoice to PM

Country of Origin:

BIOSECURITY

Page 1 of 1

COC # (if applicable)

Environmental Division

Sydney

Work Order Reference

ES2533538

Barcode

Telephone - 01-2-8784 8656

Additional Information

(Comment on hazards - e.g., asbestos, known high contamination)

Additional bottles for Lab QC

Additional bottles for Lab QC

Additional bottles for Lab QC

Additional bottles for Lab QC

Additional bottles for Lab QC

Additional bottles for Lab QC

Additional bottles for Lab QC

Additional bottles for Lab QC

Additional bottles for Lab QC

ALS Use Only	Sample ID	Depth	Date/Time	No. Bottles	MATRIX: Soil/Solid(S) Water(W) Sediments (SD), Dust (D), Product (P), Biota (B), Biosolid (BS)	ANALYSIS REQUIRED	CC Invoice to PM	Country of Origin:	BIOSECURITY	Additional Information
	0021_MM018_251021		21 Oct 2025 16:49	4	W	EP231X (PFAS - Full Suite (30 analytes))				
	0021_MM020_251021		21 Oct 2025 15:24	2	W	EP231X (solids) PFAS - Full Suite (30 analytes)				
	0021_MM021_251021		21 Oct 2025 14:48	2	W	EP231X-LL - PFAS - Low Level Full Suite (30 analytes) (<0.002 - 0.01 ug/L)				
	0021_MM022_251023		23 Oct 2025 15:06	2	W	Subson / Forward Lab (Split W/O)				ES2533521
	0021_MM026_251021		21 Oct 2025 13:51	4	W	Lab / Analysis:				Additional bottles for Lab QC
	0021_MM028_251021		21 Oct 2025 10:59	2	W	Organised By / Date:				
	0021_MM030_251022		22 Oct 2025 14:51	2	W	Relinquished By / Date:				
	0021_MM040_251023		23 Oct 2025 13:57	4	W	Corrode / Corroder:				Additional bottles for Lab QC
	0021_MM061_251023		23 Oct 2025 13:25	2	W	WO No:				
	0021_MM062_251022		22 Oct 2025 15:18	4	W	Attached By PO / Internal Sheet:				Additional bottles for Lab QC
	0021_MM063_251022		22 Oct 2025 10:52	4	W					Additional bottles for Lab QC
	0021_MM064_251022		22 Oct 2025 14:15	2	W					
	0021_MM065_251022		22 Oct 2025 15:06	4	W					Additional bottles for Lab QC
	0021_MM070_251023		23 Oct 2025 12:25	2	W					
	0021_MM071_251023		23 Oct 2025 13:31	2	W					

Rec: 24th Nov 1630.

1	0021_QC202_251021				21 Oct 2025 07:54	2	W										X	☐	☐	Forward with Attached COC
1	0021_QC203_251021				21 Oct 2025 10:55	2	W										X	☐	☐	Forward with Attached COC
1	0021_QC204_251022				22 Oct 2025 13:50	2	W										X	☐	☐	Forward with Attached COC
1	0021_QC223_251021				21 Oct 2025 10:59	2	W										X	☐	☐	Forward with Attached COC
1	0021_QC224_251021				21 Oct 2025 14:48	2	W										X	☐	☐	Forward with Attached COC
1	0021_QC225_251022				22 Oct 2025 08:38	2	W										X	☐	☐	Forward with Attached COC
1	0021_QC226_251022				22 Oct 2025 10:50	1	S										X	☐	☐	Forward with Attached COC
1	0021_QC227_251022				22 Oct 2025 15:46	2	W										X	☐	☐	Forward with Attached COC
1	0021_QC240_251021				21 Oct 2025 11:45	2	W										X	☐	☐	Forward with Attached COC
1	0021_QC241_251022				22 Oct 2025 11:38	2	W										X	☐	☐	Forward with Attached COC
1	0021_QC242_251022				22 Oct 2025 15:18	2	W										X	☐	☐	Forward with Attached COC
1	0021_QC261_251021				21 Oct 2025 09:27	2	W										X	☐	☐	Forward with Attached COC
1	0021_QC262_251021				21 Oct 2025 15:03	2	W										X	☐	☐	Forward with Attached COC
1	0021_QC265_251022				22 Oct 2025 14:15	2	W										X	☐	☐	Forward with Attached COC
1	0021_QC266_251023				23 Oct 2025 11:27	2	W										X	☐	☐	Forward with Attached COC
34	0021_QC301_251021				21 Oct 2025	2	W	X										☐	☐	
35	0021_QC302_251022				22 Oct 2025	2	W	X										☐	☐	
36	0021_QC304_251023				23 Oct 2025	2	W	X										☐	☐	
37	0021_QC321_251021				21 Oct 2025	2	W	X										☐	☐	
38	0021_QC322_251022				22 Oct 2025	2	W	X										☐	☐	
39	0021_QC324_251023				23 Oct 2025	2	W	X										☐	☐	
40	0021_QC341_251021				21 Oct 2025	2	W	X										☐	☐	
41	0021_QC342_251022				22 Oct 2025	2	W	X										☐	☐	
42	0021_QC343_251023				23 Oct 2025	2	W	X										☐	☐	
43	0021_QC361_251021				21 Oct 2025	2	W	X										☐	☐	
44	0021_QC362_251022				22 Oct 2025	2	W	X										☐	☐	
45	0021_QC364_251023				23 Oct 2025	2	W	X										☐	☐	
46	0021_QC502_251024				24 Oct 2025	1	S		X									☐	☐	Trip Blank
47	0021_QC503_251024				24 Oct 2025	2	W	X										☐	☐	Trip Blank



SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order : **ES2533538**

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	: ACT_0021_PFASOMP_25 / Jervis Bay Range Facility PFAS Ongoing Monitoring Program	Page	: 1 of 4
Order number	: 12626622	Quote number	: ES2023GHDSER0026 (ES23GHDSER0026_V3)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: 0021 Jervis Bay Range Facility		
Sampler	: AD / AK / ES / LR		

Dates

Date Samples Received	: 24-Oct-2025 16:30	Issue Date	: 27-Oct-2025
Client Requested Due Date	: 31-Oct-2025	Scheduled Reporting Date	: 31-Oct-2025

Delivery Details

Mode of Delivery	: Undefined	Security Seal	: Not Available
No. of coolers/boxes	: 6	Temperature	: 1.7°C, 1.7°C, 1.3°C - Ice present
Receipt Detail	: Hard Eskey's	No. of samples received / analysed	: 47 / 45

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
- **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.**
- **Split Workorder - Remaining samples have been logged under ES2533521**
- **Sample 10 '021_SW068_251020' 1 bottle received as '020_SW068_251020'**
- **Sample 42 '0021_QC343_251023' received as '0021_QC344_251023'**
- 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.

ES2533538-046 : [24-Oct-2025] : 0021_QC502_251024 - Trip Blank

ES2533538-047 : [24-Oct-2025] : 0021_QC503_251024 - Trip Blank

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: SOIL

Laboratory sample ID	Sampling date / time	Sample ID	SOIL - EA055-103 Moisture Content	SOIL - EP231X (solids) PFAS - Full Suite (30 analytes)
ES2533538-025	22-Oct-2025 10:50	0021_QC126_251022	✓	✓
ES2533538-046	24-Oct-2025 00:00	0021_QC502_251024 T...	✓	✓

Matrix: WATER

Laboratory sample ID	Sampling date / time	Sample ID	(On Hold) WATER No analysis requested	WATER - EP231X PFAS - Full Suite (31 analytes)
ES2533538-001	21-Oct-2025 07:54	0021_SW043_251021		✓
ES2533538-002	21-Oct-2025 09:14	0021_SW044_251021		✓
ES2533538-003	21-Oct-2025 09:59	0021_SW045_251021		✓
ES2533538-004	21-Oct-2025 16:27	0021_SW048_251021		✓
ES2533538-005	21-Oct-2025 08:21	0021_SW052_251021		✓
ES2533538-006	21-Oct-2025 09:40	0021_SW053_251021		✓
ES2533538-007	21-Oct-2025 07:52	0021_SW056_251021		✓
ES2533538-008	21-Oct-2025 09:57	0021_SW057_251021		✓
ES2533538-009	21-Oct-2025 09:27	0021_SW058_251021		✓
ES2533538-010	20-Oct-2025 16:52	0021_SW068_251020		✓
ES2533538-011	23-Oct-2025 09:16	0021_SW076_251023		✓
ES2533538-012	23-Oct-2025 08:59	0021_SW077_251023		✓
ES2533538-013	23-Oct-2025 08:43	0021_SW078_251023		✓
ES2533538-014	23-Oct-2025 08:04	0021_SW079_251023		✓
ES2533538-015	23-Oct-2025 07:42	0021_SW080_251023		✓
ES2533538-016	23-Oct-2025 15:05	0021_SW153_251023		✓
ES2533538-017	21-Oct-2025 15:03	0021_SW188_251021		✓



			(On Hold) WATER No analysis requested	WATER - EP231X PFAS - Full Suite (31 analytes)
ES2533538-018	21-Oct-2025 08:45	0021_SW211_251021		✓
ES2533538-019	21-Oct-2025 13:49	0021_SW212_251021		✓
ES2533538-020	21-Oct-2025 07:54	0021_QC102_251021		✓
ES2533538-021	21-Oct-2025 10:55	0021_QC103_251021		✓
ES2533538-022	22-Oct-2025 13:50	0021_QC104_251022		✓
ES2533538-023	21-Oct-2025 10:59	0021_QC123_251021		✓
ES2533538-024	21-Oct-2025 14:18	0021_QC124_251021		✓
ES2533538-026	22-Oct-2025 15:46	0021_QC127_251022	✓	
ES2533538-027	21-Oct-2025 11:45	0021_QC140_251021		✓
ES2533538-028	22-Oct-2025 11:38	0021_QC141_251022		✓
ES2533538-029	22-Oct-2025 15:18	0021_QC142_251022	✓	
ES2533538-030	21-Oct-2025 09:27	0021_QC161_251021		✓
ES2533538-031	21-Oct-2025 15:03	0021_QC162_251021		✓
ES2533538-032	22-Oct-2025 14:15	0021_QC165_251022		✓
ES2533538-033	23-Oct-2025 11:27	0021_QC166_251023		✓
ES2533538-034	21-Oct-2025 00:00	0021_QC301_251021		✓
ES2533538-035	22-Oct-2025 00:00	0021_QC302_251022		✓
ES2533538-036	23-Oct-2025 00:00	0021_QC304_251023		✓
ES2533538-037	21-Oct-2025 00:00	0021_QC321_251021		✓
ES2533538-038	22-Oct-2025 00:00	0021_QC322_251022		✓
ES2533538-039	23-Oct-2025 00:00	0021_QC324_251023		✓
ES2533538-040	21-Oct-2025 00:00	0021_QC341_251021		✓
ES2533538-041	22-Oct-2025 00:00	0021_QC342_251022		✓
ES2533538-042	23-Oct-2025 00:00	0021_QC343_251023		✓
ES2533538-043	21-Oct-2025 00:00	0021_QC361_251021		✓
ES2533538-044	22-Oct-2025 00:00	0021_QC362_251022		✓
ES2533538-045	23-Oct-2025 00:00	0021_QC364_251023		✓
ES2533538-047	24-Oct-2025 00:00	0021_QC503_251024 T...		✓

Proactive Holding Time Report

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



Requested Deliverables

Accounts Payable Australia

- A4 - AU Tax Invoice (INV)

Email accountspayableAU@ghd.com

ANDREW DUVAL

- *AU Certificate of Analysis - NATA (COA)
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)
- Chain of Custody (CoC) (COC)
- EDI Format - ESDAT (ESDAT)
- Electronic SRN for ESdat (ESRN_ESDAT)

Email andrew.duval@ghd.com
Email andrew.duval@ghd.com
Email andrew.duval@ghd.com
Email andrew.duval@ghd.com
Email andrew.duval@ghd.com
Email andrew.duval@ghd.com
Email andrew.duval@ghd.com

DREW MORGAN

- *AU Certificate of Analysis - NATA (COA)
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)
- Chain of Custody (CoC) (COC)
- EDI Format - ESDAT (ESDAT)
- Electronic SRN for ESdat (ESRN_ESDAT)

Email drew.morgan@ghd.com
Email drew.morgan@ghd.com
Email drew.morgan@ghd.com
Email drew.morgan@ghd.com
Email drew.morgan@ghd.com
Email drew.morgan@ghd.com
Email drew.morgan@ghd.com

esdat

- *AU Certificate of Analysis - NATA (COA)
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)
- Chain of Custody (CoC) (COC)
- EDI Format - ESDAT (ESDAT)
- Electronic SRN for ESdat (ESRN_ESDAT)

Email esdat+ghd_au@esdatlabsync.net
Email esdat+ghd_au@esdatlabsync.net
Email esdat+ghd_au@esdatlabsync.net
Email esdat+ghd_au@esdatlabsync.net
Email esdat+ghd_au@esdatlabsync.net
Email esdat+ghd_au@esdatlabsync.net
Email esdat+ghd_au@esdatlabsync.net

HELEN MILNE

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

Email helen.milne@ghd.com
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Email helen.milne@ghd.com
Email helen.milne@ghd.com

STEVEN CASTILLO

- A4 - AU Tax Invoice (INV)

Email steven.castillo@ghd.com



CERTIFICATE OF ANALYSIS

Work Order : **ES2533538**
Client : **GHD PTY LTD**
Contact : **MS HELEN MILNE**
Address : **LEVEL 15, 133 CASTLEREAGH STREET**
SYDNEY NSW, AUSTRALIA 2000
Telephone : **+61 02 9239 7100**
Project : **ACT_0021_PFASOMP_25 / Jervis Bay Range Facility PFAS**
Ongoing Monitoring Program
Order number : **12626622**
C-O-C number : **----**
Sampler : **AD / AK / ES / LR**
Site : **0021 Jervis Bay Range Facility**
Quote number : **ES23GHDSE0026_V3**
No. of samples received : **47**
No. of samples analysed : **45**

Page : 1 of 23
Laboratory : Environmental Division Sydney
Contact : Samiksha Sathish
Address : 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone : +61-2-8784 8555
Date Samples Received : 24-Oct-2025 16:30
Date Analysis Commenced : 28-Oct-2025
Issue Date : 31-Oct-2025 13:56



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
Franco Lentini	LCMS Coordinator	Sydney Inorganics, Smithfield, NSW
Franco Lentini	LCMS Coordinator	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.
- EP231: Stable isotope enriched internal standards are added to samples prior to extraction. Target compounds have a direct analogous internal standard with the exception of PFPeS, PFHpA, PFDS, PFTrDA and 10:2 FTS. These compounds use an internal standard that is chemically related and has a retention time close to that of the target compound. The DQO for internal standard response is 50-150% of that established at initial calibration or as per USEPA 1633 limits where listed. PFOS is quantified using a certified, traceable standard consisting of linear and branched PFOS isomers. These practices are in line with recommendations in the National Environmental Management Plan for PFAS and also conform to QSM 5.4 (US DoD) requirements.



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				0021_QC126_251022	0021_QC502_251024 Trip Blank	----	----	----
Sampling date / time				22-Oct-2025 10:50	24-Oct-2025 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2533538-025	ES2533538-046	-----	-----	-----
				Result	Result	----	----	----
EP231C: Perfluoroalkyl Sulfonamides - Continued								
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	<0.0002	----	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0006	<0.0005	----	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0006	<0.0005	----	----	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0006	<0.0005	----	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0006	<0.0005	----	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	<0.0002	----	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	<0.0002	----	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	<0.0005	----	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	<0.0005	----	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	<0.0005	----	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	<0.0005	----	----	----
EP231P: PFAS Sums								
Sum of PFAS	----	0.0002	mg/kg	0.0435	<0.0002	----	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	0.0435	<0.0002	----	----	----
Sum of PFAS (WA DER List)	----	0.0002	mg/kg	0.0435	<0.0002	----	----	----
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.0002	%	97.8	93.8	----	----	----
13C8-PFOA	----	0.0002	%	93.9	96.8	----	----	----



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				0021_SW043_251021	0021_SW044_251021	0021_SW045_251021	0021_SW048_251021	0021_SW052_251021
Sampling date / time				21-Oct-2025 07:54	21-Oct-2025 09:14	21-Oct-2025 09:59	21-Oct-2025 16:27	21-Oct-2025 08:21
Compound	CAS Number	LOR	Unit	ES2533538-001	ES2533538-002	ES2533538-003	ES2533538-004	ES2533538-005
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	0.10	0.04	<0.01	0.03	0.03
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	0.18	0.13	<0.01	0.02	0.05
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	<0.02	<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	<0.01	<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

				0021_SW043_251021	0021_SW044_251021	0021_SW045_251021	0021_SW048_251021	0021_SW052_251021
Sampling date / time				21-Oct-2025 07:54	21-Oct-2025 09:14	21-Oct-2025 09:59	21-Oct-2025 16:27	21-Oct-2025 08:21
Compound	CAS Number	LOR	Unit	ES2533538-001	ES2533538-002	ES2533538-003	ES2533538-004	ES2533538-005
				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	0.28	0.17	<0.01	0.05	0.08
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	0.28	0.17	<0.01	0.05	0.08
Sum of PFAS (WA DER List)	----	0.01	µg/L	0.28	0.17	<0.01	0.05	0.08
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	97.8	97.9	98.2	96.5	94.3
13C8-PFOA	----	0.02	%	99.6	99.2	96.6	99.2	98.9



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				0021_SW053_251021	0021_SW056_251021	0021_SW057_251021	0021_SW058_251021	0021_SW068_251020
Sampling date / time				21-Oct-2025 09:40	21-Oct-2025 07:52	21-Oct-2025 09:57	21-Oct-2025 09:27	20-Oct-2025 16:52
Compound	CAS Number	LOR	Unit	ES2533538-006	ES2533538-007	ES2533538-008	ES2533538-009	ES2533538-010
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	0.39	<0.01	<0.01	<0.01	<0.01
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	0.60	<0.01	<0.01	<0.01	<0.01
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	0.05	<0.02	<0.02	<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	0.02	<0.01	<0.01	<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

				0021_SW053_251021	0021_SW056_251021	0021_SW057_251021	0021_SW058_251021	0021_SW068_251020
Sampling date / time				21-Oct-2025 09:40	21-Oct-2025 07:52	21-Oct-2025 09:57	21-Oct-2025 09:27	20-Oct-2025 16:52
Compound	CAS Number	LOR	Unit	ES2533538-006	ES2533538-007	ES2533538-008	ES2533538-009	ES2533538-010
				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	1.10	<0.01	<0.01	<0.01	<0.01
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	0.99	<0.01	<0.01	<0.01	<0.01
Sum of PFAS (WA DER List)	----	0.01	µg/L	1.06	<0.01	<0.01	<0.01	<0.01
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	100	97.6	95.1	95.6	95.0
13C8-PFOA	----	0.02	%	97.7	97.2	97.7	97.2	99.0



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				0021_SW076_251023	0021_SW077_251023	0021_SW078_251023	0021_SW079_251023	0021_SW080_251023
Sampling date / time				23-Oct-2025 09:16	23-Oct-2025 08:59	23-Oct-2025 08:43	23-Oct-2025 08:04	23-Oct-2025 07:42
Compound	CAS Number	LOR	Unit	ES2533538-011	ES2533538-012	ES2533538-013	ES2533538-014	ES2533538-015
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	<0.01	0.03	0.01
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	0.06	0.03
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	<0.02	<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	<0.01	<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

				0021_SW076_251023	0021_SW077_251023	0021_SW078_251023	0021_SW079_251023	0021_SW080_251023
Sampling date / time				23-Oct-2025 09:16	23-Oct-2025 08:59	23-Oct-2025 08:43	23-Oct-2025 08:04	23-Oct-2025 07:42
Compound	CAS Number	LOR	Unit	ES2533538-011	ES2533538-012	ES2533538-013	ES2533538-014	ES2533538-015
				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	<0.01	<0.01	<0.01	0.09	0.04
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	0.09	0.04
Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	<0.01	0.09	0.04
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	97.8	99.6	101	100	99.7
13C8-PFOA	----	0.02	%	97.9	99.2	99.2	96.0	98.5



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				0021_SW153_251023	0021_SW188_251021	0021_SW211_251021	0021_SW212_251021	0021_QC102_251021
Sampling date / time				23-Oct-2025 15:05	21-Oct-2025 15:03	21-Oct-2025 08:45	21-Oct-2025 13:49	21-Oct-2025 07:54
Compound	CAS Number	LOR	Unit	ES2533538-016	ES2533538-017	ES2533538-018	ES2533538-019	ES2533538-020
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	0.23	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	0.21	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	2.88	0.01	<0.01	<0.01	0.09
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	0.16	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	5.08	<0.01	<0.01	<0.01	0.17
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	0.05	<0.02	<0.02	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	0.45	<0.02	<0.02	<0.02	<0.02
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	0.04	<0.02	<0.02	<0.02	<0.02
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	0.14	<0.01	<0.01	<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

				0021_SW153_251023	0021_SW188_251021	0021_SW211_251021	0021_SW212_251021	0021_QC102_251021
Sampling date / time				23-Oct-2025 15:05	21-Oct-2025 15:03	21-Oct-2025 08:45	21-Oct-2025 13:49	21-Oct-2025 07:54
Compound	CAS Number	LOR	Unit	ES2533538-016	ES2533538-017	ES2533538-018	ES2533538-019	ES2533538-020
				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	9.31	0.01	<0.01	<0.01	0.26
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	7.96	0.01	<0.01	<0.01	0.26
Sum of PFAS (WA DER List)	----	0.01	µg/L	8.87	0.01	<0.01	<0.01	0.26
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	99.9	102	99.6	96.7	99.7
13C8-PFOA	----	0.02	%	95.2	96.7	97.3	97.8	100.0



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				0021_QC103_251021	0021_QC104_251022	0021_QC123_251021	0021_QC124_251021	0021_QC140_251021
Sampling date / time				21-Oct-2025 10:55	22-Oct-2025 13:50	21-Oct-2025 10:59	21-Oct-2025 14:18	21-Oct-2025 11:45
Compound	CAS Number	LOR	Unit	ES2533538-021	ES2533538-022	ES2533538-023	ES2533538-024	ES2533538-027
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	0.03
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.04	<0.01	0.50
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	0.04	<0.01	0.42
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	0.03	0.02	<0.02	0.03
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	<0.01	<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

				0021_QC103_251021	0021_QC104_251022	0021_QC123_251021	0021_QC124_251021	0021_QC140_251021
Sampling date / time				21-Oct-2025 10:55	22-Oct-2025 13:50	21-Oct-2025 10:59	21-Oct-2025 14:18	21-Oct-2025 11:45
Compound	CAS Number	LOR	Unit	ES2533538-021	ES2533538-022	ES2533538-023	ES2533538-024	ES2533538-027
				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	<0.01	0.03	0.10	<0.01	0.99
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.08	<0.01	0.92
Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	0.03	0.10	<0.01	0.96
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	97.0	100	98.0	92.4	93.4
13C8-PFOA	----	0.02	%	104	97.3	99.6	98.7	98.6



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				0021_QC141_251022	0021_QC161_251021	0021_QC162_251021	0021_QC165_251022	0021_QC166_251023
Sampling date / time				22-Oct-2025 11:38	21-Oct-2025 09:27	21-Oct-2025 15:03	22-Oct-2025 14:15	23-Oct-2025 11:27
Compound	CAS Number	LOR	Unit	ES2533538-028	ES2533538-030	ES2533538-031	ES2533538-032	ES2533538-033
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	<0.02	0.10	0.15
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	<0.02	0.10	0.22
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	<0.01	0.36	3.21
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	0.12
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	0.28	4.05
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	0.10
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	<0.02	0.06	0.43
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	0.05
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	<0.01	0.01	0.12
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

				0021_QC141_251022	0021_QC161_251021	0021_QC162_251021	0021_QC165_251022	0021_QC166_251023
Sampling date / time				22-Oct-2025 11:38	21-Oct-2025 09:27	21-Oct-2025 15:03	22-Oct-2025 14:15	23-Oct-2025 11:27
Compound	CAS Number	LOR	Unit	ES2533538-028	ES2533538-030	ES2533538-031	ES2533538-032	ES2533538-033
				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	<0.01	<0.01	<0.01	0.96	8.49
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	0.64	7.26
Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	<0.01	0.81	8.11
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	96.4	91.0	98.2	99.8	99.4
13C8-PFOA	----	0.02	%	103	95.8	101	97.7	98.4



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				0021_QC301_251021	0021_QC302_251022	0021_QC304_251023	0021_QC321_251021	0021_QC322_251022
Sampling date / time				21-Oct-2025 00:00	22-Oct-2025 00:00	23-Oct-2025 00:00	21-Oct-2025 00:00	22-Oct-2025 00:00
Compound	CAS Number	LOR	Unit	ES2533538-034	ES2533538-035	ES2533538-036	ES2533538-037	ES2533538-038
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
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	<0.02	<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	<0.01	<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	0021_QC301_251021	0021_QC302_251022	0021_QC304_251023	0021_QC321_251021	0021_QC322_251022
Sampling date / time					21-Oct-2025 00:00	22-Oct-2025 00:00	23-Oct-2025 00:00	21-Oct-2025 00:00	22-Oct-2025 00:00
Compound	CAS Number	LOR	Unit		ES2533538-034	ES2533538-035	ES2533538-036	ES2533538-037	ES2533538-038
					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		<0.01	<0.01	<0.01	<0.01	<0.01
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		<0.01	<0.01	<0.01	<0.01	<0.01
Sum of PFAS (WA DER List)	----	0.01	µg/L		<0.01	<0.01	<0.01	<0.01	<0.01
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		98.6	102	98.1	100	103
13C8-PFOA	----	0.02	%		100	99.8	99.9	99.9	97.0



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				0021_QC324_251023	0021_QC341_251021	0021_QC342_251022	0021_QC343_251023	0021_QC361_251021
Sampling date / time				23-Oct-2025 00:00	21-Oct-2025 00:00	22-Oct-2025 00:00	23-Oct-2025 00:00	21-Oct-2025 00:00
Compound	CAS Number	LOR	Unit	ES2533538-039	ES2533538-040	ES2533538-041	ES2533538-042	ES2533538-043
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
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	<0.02	<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	<0.01	<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

				0021_QC324_251023	0021_QC341_251021	0021_QC342_251022	0021_QC343_251023	0021_QC361_251021
Sampling date / time				23-Oct-2025 00:00	21-Oct-2025 00:00	22-Oct-2025 00:00	23-Oct-2025 00:00	21-Oct-2025 00:00
Compound	CAS Number	LOR	Unit	ES2533538-039	ES2533538-040	ES2533538-041	ES2533538-042	ES2533538-043
				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	<0.01	<0.01	<0.01	<0.01	<0.01
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	94.1	97.5	97.2	92.8	95.1
13C8-PFOA	----	0.02	%	95.3	92.8	96.5	94.3	95.9



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				0021_QC362_251022	0021_QC364_251023	0021_QC503_251024 Trip Blank	----	----
Sampling date / time				22-Oct-2025 00:00	23-Oct-2025 00:00	24-Oct-2025 00:00	----	----
Compound	CAS Number	LOR	Unit	ES2533538-044	ES2533538-045	ES2533538-047	-----	-----
				Result	Result	Result	----	----
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	<0.01	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<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	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	<0.01	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<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	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	<0.05	----	----



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				0021_QC362_251022	0021_QC364_251023	0021_QC503_251024 Trip Blank	----	----
Sampling date / time				22-Oct-2025 00:00	23-Oct-2025 00:00	24-Oct-2025 00:00	----	----
Compound	CAS Number	LOR	Unit	ES2533538-044	ES2533538-045	ES2533538-047	-----	-----
				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	----	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	<0.05	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<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	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<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	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<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	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	<0.05	----	----
EP231P: PFAS Sums								
Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	<0.01	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	----	----
Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	<0.01	----	----
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	93.2	95.4	93.2	----	----
13C8-PFOA	----	0.02	%	97.6	95.2	96.9	----	----



Surrogate Control Limits

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

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



QA/QC Compliance Assessment to assist with Quality Review

Work Order	: ES2533538	Page	: 1 of 10
Client	: GHD PTY LTD	Laboratory	: Environmental Division Sydney
Contact	: MS HELEN MILNE	Telephone	: +61-2-8784 8555
Project	: ACT_0021_PFASOMP_25 / Jervis Bay Range Facility PFAS Ongoing Monitoring Program	Date Samples Received	: 24-Oct-2025
Site	: 0021 Jervis Bay Range Facility	Issue Date	: 31-Oct-2025
Sampler	: AD / AK / ES / LR	No. of samples received	: 47
Order number	: 12626622	No. of samples analysed	: 45

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

- Quality Control Sample Frequency Outliers exist - please see following pages for full details.



Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Matrix Spike (MS) Recoveries							
EP231A: Perfluoroalkyl Sulfonic Acids	ES2533521--059	Anonymous	Perfluorooctane sulfonic acid (PFOS)	1763-23-1	Not Determined	----	MS recovery not determined, background level greater than or equal to 4x spike level.

Outliers : Frequency of Quality Control Samples

Matrix: **SOIL**

Quality Control Sample Type		Count		Rate (%)		Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	
Laboratory Duplicates (DUP)						
Moisture Content	EA055	2	27	7.41	10.00	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

Quality Control Sample Type		Count		Rate (%)		Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	
Laboratory Duplicates (DUP)						
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	5	58	8.62	10.00	NEPM 2013 B3 & ALS QC Standard

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: **SOIL**

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

Method	Sample Date	Extraction / Preparation			Analysis		
Container / Client Sample ID(s)		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA055: Moisture Content (Dried @ 105-110°C)							
HDPE Soil Jar (EA055) 0021_QC126_251022	22-Oct-2025	----	----	----	29-Oct-2025	05-Nov-2025	✓
HDPE Soil Jar (EA055) 0021_QC502_251024 - Trip Blank	24-Oct-2025	----	----	----	29-Oct-2025	07-Nov-2025	✓
EP231A: Perfluoroalkyl Sulfonic Acids							
HDPE Soil Jar (EP231X) 0021_QC126_251022	22-Oct-2025	29-Oct-2025	20-Apr-2026	✓	31-Oct-2025	08-Dec-2025	✓
HDPE Soil Jar (EP231X) 0021_QC502_251024 - Trip Blank	24-Oct-2025	29-Oct-2025	22-Apr-2026	✓	31-Oct-2025	08-Dec-2025	✓

Page : 3 of 10
 Work Order : ES2533538
 Client : GHD PTY LTD
 Project : ACT_0021_PFASOMP_25 / Jervis Bay Range Facility PFAS Ongoing Monitoring Program



Matrix: **SOIL**

Evaluation: ✖ = Holding time breach ; ✔ = Within holding time.

Method	Sample Date	Extraction / Preparation			Analysis		
Container / Client Sample ID(s)		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE Soil Jar (EP231X) 0021_QC126_251022	22-Oct-2025	29-Oct-2025	20-Apr-2026	✔	31-Oct-2025	08-Dec-2025	✔
HDPE Soil Jar (EP231X) 0021_QC502_251024 - Trip Blank	24-Oct-2025	29-Oct-2025	22-Apr-2026	✔	31-Oct-2025	08-Dec-2025	✔
EP231C: Perfluoroalkyl Sulfonamides							
HDPE Soil Jar (EP231X) 0021_QC126_251022	22-Oct-2025	29-Oct-2025	20-Apr-2026	✔	31-Oct-2025	08-Dec-2025	✔
HDPE Soil Jar (EP231X) 0021_QC502_251024 - Trip Blank	24-Oct-2025	29-Oct-2025	22-Apr-2026	✔	31-Oct-2025	08-Dec-2025	✔
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE Soil Jar (EP231X) 0021_QC126_251022	22-Oct-2025	29-Oct-2025	20-Apr-2026	✔	31-Oct-2025	08-Dec-2025	✔
HDPE Soil Jar (EP231X) 0021_QC502_251024 - Trip Blank	24-Oct-2025	29-Oct-2025	22-Apr-2026	✔	31-Oct-2025	08-Dec-2025	✔
EP231P: PFAS Sums							
HDPE Soil Jar (EP231X) 0021_QC126_251022	22-Oct-2025	29-Oct-2025	20-Apr-2026	✔	31-Oct-2025	08-Dec-2025	✔
HDPE Soil Jar (EP231X) 0021_QC502_251024 - Trip Blank	24-Oct-2025	29-Oct-2025	22-Apr-2026	✔	31-Oct-2025	08-Dec-2025	✔

Matrix: **WATER**

Evaluation: ✖ = Holding time breach ; ✔ = Within holding time.

Method	Sample Date	Extraction / Preparation			Analysis		
Container / Client Sample ID(s)		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation



Matrix: **WATER**

Evaluation: ✖ = Holding time breach ; ✔ = Within holding time.

Method	Sample Date	Extraction / Preparation			Analysis		
Container / Client Sample ID(s)		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231A: Perfluoroalkyl Sulfonic Acids							
HDPE (no PTFE) (EP231X) 0021_SW068_251020	20-Oct-2025	28-Oct-2025	18-Apr-2026	✔	31-Oct-2025	18-Apr-2026	✔
HDPE (no PTFE) (EP231X) 0021_SW043_251021, 0021_SW044_251021, 0021_SW045_251021, 0021_SW048_251021, 0021_SW052_251021, 0021_SW053_251021, 0021_SW056_251021, 0021_SW057_251021, 0021_SW058_251021, 0021_SW188_251021, 0021_SW211_251021, 0021_SW212_251021, 0021_QC102_251021, 0021_QC103_251021, 0021_QC123_251021, 0021_QC124_251021, 0021_QC140_251021, 0021_QC161_251021, 0021_QC162_251021, 0021_QC301_251021, 0021_QC321_251021, 0021_QC341_251021, 0021_QC361_251021	21-Oct-2025	28-Oct-2025	19-Apr-2026	✔	31-Oct-2025	19-Apr-2026	✔
HDPE (no PTFE) (EP231X) 0021_QC104_251022, 0021_QC141_251022, 0021_QC165_251022, 0021_QC302_251022, 0021_QC322_251022, 0021_QC342_251022, 0021_QC362_251022	22-Oct-2025	28-Oct-2025	20-Apr-2026	✔	31-Oct-2025	20-Apr-2026	✔
HDPE (no PTFE) (EP231X) 0021_SW076_251023, 0021_SW077_251023, 0021_SW078_251023, 0021_SW079_251023, 0021_SW080_251023, 0021_SW153_251023, 0021_QC166_251023, 0021_QC304_251023, 0021_QC324_251023, 0021_QC343_251023, 0021_QC364_251023	23-Oct-2025	28-Oct-2025	21-Apr-2026	✔	31-Oct-2025	21-Apr-2026	✔
HDPE (no PTFE) (EP231X) 0021_QC503_251024 - Trip Blank	24-Oct-2025	28-Oct-2025	22-Apr-2026	✔	31-Oct-2025	22-Apr-2026	✔



Matrix: **WATER**

Evaluation: ✖ = Holding time breach ; ✔ = Within holding time.

Method	Sample Date	Extraction / Preparation			Analysis		
Container / Client Sample ID(s)		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE (no PTFE) (EP231X) 0021_SW068_251020	20-Oct-2025	28-Oct-2025	18-Apr-2026	✔	31-Oct-2025	18-Apr-2026	✔
HDPE (no PTFE) (EP231X) 0021_SW043_251021, 0021_SW044_251021, 0021_SW045_251021, 0021_SW048_251021, 0021_SW052_251021, 0021_SW053_251021, 0021_SW056_251021, 0021_SW057_251021, 0021_SW058_251021, 0021_SW188_251021, 0021_SW211_251021, 0021_SW212_251021, 0021_QC102_251021, 0021_QC103_251021, 0021_QC123_251021, 0021_QC124_251021, 0021_QC140_251021, 0021_QC161_251021, 0021_QC162_251021, 0021_QC301_251021, 0021_QC321_251021, 0021_QC341_251021, 0021_QC361_251021	21-Oct-2025	28-Oct-2025	19-Apr-2026	✔	31-Oct-2025	19-Apr-2026	✔
HDPE (no PTFE) (EP231X) 0021_QC104_251022, 0021_QC141_251022, 0021_QC165_251022, 0021_QC302_251022, 0021_QC322_251022, 0021_QC342_251022, 0021_QC362_251022	22-Oct-2025	28-Oct-2025	20-Apr-2026	✔	31-Oct-2025	20-Apr-2026	✔
HDPE (no PTFE) (EP231X) 0021_SW076_251023, 0021_SW077_251023, 0021_SW078_251023, 0021_SW079_251023, 0021_SW080_251023, 0021_SW153_251023, 0021_QC166_251023, 0021_QC304_251023, 0021_QC324_251023, 0021_QC343_251023, 0021_QC364_251023	23-Oct-2025	28-Oct-2025	21-Apr-2026	✔	31-Oct-2025	21-Apr-2026	✔
HDPE (no PTFE) (EP231X) 0021_QC503_251024 - Trip Blank	24-Oct-2025	28-Oct-2025	22-Apr-2026	✔	31-Oct-2025	22-Apr-2026	✔



Matrix: **WATER**

Evaluation: ✖ = Holding time breach ; ✔ = Within holding time.

Method	Sample Date	Extraction / Preparation			Analysis		
Container / Client Sample ID(s)		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231C: Perfluoroalkyl Sulfonamides							
HDPE (no PTFE) (EP231X) 0021_SW068_251020	20-Oct-2025	28-Oct-2025	18-Apr-2026	✔	31-Oct-2025	18-Apr-2026	✔
HDPE (no PTFE) (EP231X) 0021_SW043_251021, 0021_SW044_251021, 0021_SW045_251021, 0021_SW048_251021, 0021_SW052_251021, 0021_SW053_251021, 0021_SW056_251021, 0021_SW057_251021, 0021_SW058_251021, 0021_SW188_251021, 0021_SW211_251021, 0021_SW212_251021, 0021_QC102_251021, 0021_QC103_251021, 0021_QC123_251021, 0021_QC124_251021, 0021_QC140_251021, 0021_QC161_251021, 0021_QC162_251021, 0021_QC301_251021, 0021_QC321_251021, 0021_QC341_251021, 0021_QC361_251021	21-Oct-2025	28-Oct-2025	19-Apr-2026	✔	31-Oct-2025	19-Apr-2026	✔
HDPE (no PTFE) (EP231X) 0021_QC104_251022, 0021_QC141_251022, 0021_QC165_251022, 0021_QC302_251022, 0021_QC322_251022, 0021_QC342_251022, 0021_QC362_251022	22-Oct-2025	28-Oct-2025	20-Apr-2026	✔	31-Oct-2025	20-Apr-2026	✔
HDPE (no PTFE) (EP231X) 0021_SW076_251023, 0021_SW077_251023, 0021_SW078_251023, 0021_SW079_251023, 0021_SW080_251023, 0021_SW153_251023, 0021_QC166_251023, 0021_QC304_251023, 0021_QC324_251023, 0021_QC343_251023, 0021_QC364_251023	23-Oct-2025	28-Oct-2025	21-Apr-2026	✔	31-Oct-2025	21-Apr-2026	✔
HDPE (no PTFE) (EP231X) 0021_QC503_251024 - Trip Blank	24-Oct-2025	28-Oct-2025	22-Apr-2026	✔	31-Oct-2025	22-Apr-2026	✔



Matrix: WATER

Evaluation: ✖ = Holding time breach ; ✔ = Within holding time.

Method	Sample Date	Extraction / Preparation			Analysis		
Container / Client Sample ID(s)		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE (no PTFE) (EP231X) 0021_SW068_251020	20-Oct-2025	28-Oct-2025	18-Apr-2026	✓	31-Oct-2025	18-Apr-2026	✓
HDPE (no PTFE) (EP231X) 0021_SW043_251021, 0021_SW045_251021, 0021_SW052_251021, 0021_SW056_251021, 0021_SW058_251021, 0021_SW211_251021, 0021_QC102_251021, 0021_QC123_251021, 0021_QC140_251021, 0021_QC162_251021, 0021_QC321_251021, 0021_QC361_251021	21-Oct-2025	28-Oct-2025	19-Apr-2026	✓	31-Oct-2025	19-Apr-2026	✓
HDPE (no PTFE) (EP231X) 0021_QC104_251022, 0021_QC165_251022, 0021_QC322_251022, 0021_QC362_251022	22-Oct-2025	28-Oct-2025	20-Apr-2026	✓	31-Oct-2025	20-Apr-2026	✓
HDPE (no PTFE) (EP231X) 0021_SW076_251023, 0021_SW078_251023, 0021_SW080_251023, 0021_QC166_251023, 0021_QC324_251023, 0021_QC364_251023	23-Oct-2025	28-Oct-2025	21-Apr-2026	✓	31-Oct-2025	21-Apr-2026	✓
HDPE (no PTFE) (EP231X) 0021_QC503_251024 - Trip Blank	24-Oct-2025	28-Oct-2025	22-Apr-2026	✓	31-Oct-2025	22-Apr-2026	✓



Matrix: WATER

Evaluation: ✖ = Holding time breach ; ✔ = Within holding time.

Method	Sample Date	Extraction / Preparation			Analysis		
Container / Client Sample ID(s)		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231P: PFAS Sums							
HDPE (no PTFE) (EP231X) 0021_SW068_251020	20-Oct-2025	28-Oct-2025	18-Apr-2026	✓	31-Oct-2025	18-Apr-2026	✓
HDPE (no PTFE) (EP231X) 0021_SW043_251021, 0021_SW045_251021, 0021_SW052_251021, 0021_SW056_251021, 0021_SW058_251021, 0021_SW211_251021, 0021_QC102_251021, 0021_QC123_251021, 0021_QC140_251021, 0021_QC162_251021, 0021_QC321_251021, 0021_QC361_251021	21-Oct-2025	28-Oct-2025	19-Apr-2026	✓	31-Oct-2025	19-Apr-2026	✓
HDPE (no PTFE) (EP231X) 0021_QC104_251022, 0021_QC165_251022, 0021_QC322_251022, 0021_QC362_251022	22-Oct-2025	28-Oct-2025	20-Apr-2026	✓	31-Oct-2025	20-Apr-2026	✓
HDPE (no PTFE) (EP231X) 0021_SW076_251023, 0021_SW078_251023, 0021_SW080_251023, 0021_QC166_251023, 0021_QC324_251023, 0021_QC364_251023	23-Oct-2025	28-Oct-2025	21-Apr-2026	✓	31-Oct-2025	21-Apr-2026	✓
HDPE (no PTFE) (EP231X) 0021_QC503_251024 - Trip Blank	24-Oct-2025	28-Oct-2025	22-Apr-2026	✓	31-Oct-2025	22-Apr-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: **SOIL**

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)							
Moisture Content	EA055	2	27	7.41	10.00	✖	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	18	11.11	10.00	✔	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	18	5.56	5.00	✔	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	18	5.56	5.00	✔	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	18	5.56	5.00	✔	NEPM 2013 B3 & ALS QC Standard

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	5	58	8.62	10.00	✖	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	3	58	5.17	5.00	✔	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	3	58	5.17	5.00	✔	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	3	58	5.17	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
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM Schedule B(3).
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	SOIL	In-house: Analysis of soils by solvent extraction followed by negative mode LC-ESI-MS/MS using MRM and isotope dilution or internal standard quantitation. A portion of homogenised sample is extracted along with isotope dilution standards (where commercially available) in a solution of ammonium acetate in acetonitrile/methanol. Where relevant, interferences from co-extracted organics are removed using dispersive clean-up media (dSPE). A portion of extract is combined with an equal volume of reagent water and filtered for instrumental analysis.
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
QuEChERS Extraction of Solids	ORG71	SOIL	In house: Sequential extractions with Acetonitrile/Methanol by shaking. Extraction efficiency aided by the addition of salts under acidic conditions. Where relevant, interferences from co-extracted organics are removed with dispersive clean-up media (dSPE). The extract is either diluted or concentrated and exchanged into the analytical solvent.
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.



QUALITY CONTROL REPORT

Work Order	: ES2533538	Page	: 1 of 19
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	: ACT_0021_PFASOMP_25 / Jervis Bay Range Facility PFAS Ongoing Monitoring Program	Date Samples Received	: 24-Oct-2025
Order number	: 12626622	Date Analysis Commenced	: 28-Oct-2025
C-O-C number	: ----	Issue Date	: 31-Oct-2025
Sampler	: AD / AK / ES / LR		
Site	: 0021 Jervis Bay Range Facility		
Quote number	: ES23GHDSE0026_V3		
No. of samples received	: 47		
No. of samples analysed	: 45		



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
Franco Lentini	LCMS Coordinator	Sydney Inorganics, Smithfield, NSW
Franco Lentini	LCMS Coordinator	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: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 6964643)									
ES2532996-003	Anonymous	EA055: Moisture Content	----	0.1	%	21.9	22.0	0.7	0% - 20%
ES2532996-018	Anonymous	EA055: Moisture Content	----	0.1	%	15.7	16.4	4.2	0% - 20%
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 6962652)									
ES2533521-059	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	0.0026	0.0030	12.2	0% - 50%
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	0.0007	0.0007	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	0.0568	0.0586	3.1	0% - 20%
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
ES2533521-069	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 6962652)									
ES2533521-059	Anonymous	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	0.0002	0.0002	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	0.0004	0.0005	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit



Sub-Matrix: SOIL				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: 6962652) - continued									
ES2533521-059	Anonymous	EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
ES2533521-069	Anonymous	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 6962652)									
ES2533521-059	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
ES2533521-069	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit



Sub-Matrix: SOIL				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: 6962652) - continued									
ES2533521-069	Anonymous	EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 6962652)									
ES2533521-059	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
ES2533521-069	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	<0.0005	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: 6962269)									
ES2533538-003	0021_SW045_251021	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	<0.01	<0.01	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
ES2533538-006	0021_SW053_251021	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	0.39	0.42	7.1	0% - 20%
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	0.60	0.63	4.6	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
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 6962278)									
ES2533554-008	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	<0.01	<0.01	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: 6962278) - continued									
ES2533554-008	Anonymous	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
ES2533536-001	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	0.02	0.02	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: 6962429)									
ES2533567-003	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	<0.01	<0.01	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
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 6962269)									
ES2533538-003	0021_SW045_251021	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
ES2533538-006	0021_SW053_251021	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	0.02	0.02	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	0.05	0.05	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



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: 6962269) - continued									
ES2533538-006	0021_SW053_251021	EP231X: Perfluorotridecanoic acid (PFTTrDA)	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: 6962278)									
ES2533554-008	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 (PFTTrDA)	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
ES2533536-001	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 (PFTTrDA)	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: 6962429)									
ES2533567-003	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 (PFTTrDA)	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: 6962429) - continued									
ES2533567-003	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 6962269)									
ES2533538-003	0021_SW045_251021	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
ES2533538-006	0021_SW053_251021	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: 6962278)									
ES2533554-008	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



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: 6962278) - continued									
ES2533554-008	Anonymous	EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
ES2533536-001	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: 6962429)									
ES2533567-003	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
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 6962269)									
ES2533538-003	0021_SW045_251021	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
ES2533538-006	0021_SW053_251021	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	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: 6962269) - continued									
ES2533538-006	0021_SW053_251021	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
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 6962278)									
ES2533554-008	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
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
ES2533536-001	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
		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: 6962429)									
ES2533567-003	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
		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: 6962269)									
ES2533538-003	0021_SW045_251021	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
ES2533538-006	0021_SW053_251021	EP231X: Sum of PFAS	----	0.01	µg/L	1.10	1.16	5.3	0% - 20%
EP231P: PFAS Sums (QC Lot: 6962278)									
ES2533554-008	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
ES2533536-001	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	0.02	0.02	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 6962429)									
ES2533567-003	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit



Sub-Matrix: SOIL				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%)	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result		LCS	Low	High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6962652)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	0.00125 mg/kg	98.0	72.0	128
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	110	73.0	123
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	98.3	67.0	130
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	124	70.0	132
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	91.6	68.0	136
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	107	59.0	134
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6962652)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	0.00625 mg/kg	98.5	71.0	135
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	96.0	69.0	132
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	97.6	70.0	132
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	96.1	71.0	131
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	104	69.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	106	72.0	129
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	0.00125 mg/kg	102	69.0	133
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	100	64.0	136
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	93.2	69.0	135
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	110	66.0	139
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	89.6	69.0	133
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6962652)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	112	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	0.00312 mg/kg	114	71.6	129
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	104	69.8	131
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	110	68.7	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	112	65.1	134
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	106	63.0	144
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	118	61.0	139
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6962652)								



Sub-Matrix: SOIL				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%)	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit			Result	LCS	Low
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6962652) - continued								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	0.00125 mg/kg	100.0	62.0	145
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	0.00125 mg/kg	89.8	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	0.00125 mg/kg	112	65.0	137
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	0.00125 mg/kg	134	69.2	143

Sub-Matrix: WATER				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%) LCS	Acceptable Limits (%) Low High	
Method: Compound	CAS Number	LOR	Unit	Result				
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6962269)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.25 µg/L	104	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.25 µg/L	100	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.25 µg/L	101	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	104	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.25 µg/L	99.3	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.25 µg/L	91.9	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6962278)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.25 µg/L	104	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.25 µg/L	101	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.25 µg/L	91.3	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	114	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.25 µg/L	99.1	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.25 µg/L	102	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6962429)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.25 µg/L	105	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.25 µg/L	96.6	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.25 µg/L	100	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	113	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.25 µg/L	104	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.25 µg/L	105	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6962269)								
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	104	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	112	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	107	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	106	71.0	133



Sub-Matrix: **WATER**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%) LCS	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result			Low	High
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6962269) - continued								
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	110	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	108	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	110	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	117	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	121	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	125	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6962278)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	104	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	107	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	114	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	104	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	108	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	113	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	103	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	112	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	115	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	116	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	113	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6962429)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	107	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	108	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	117	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	107	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	110	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	113	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	112	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	114	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	111	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	105	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	115	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6962269)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	96.8	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	107	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	103	62.6	147

Sub-Matrix: WATER				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%) LCS	Acceptable Limits (%) LowHigh	
Method: Compound	CAS Number	LOR	Unit	Result				
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6962269) - continued								
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	125	66.0	145
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	115	57.6	145
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	114	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	105	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6962278)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	97.9	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	103	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	106	62.6	147
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	124	66.0	145
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	123	57.6	145
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	113	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	102	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6962429)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	106	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	118	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	116	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	117	57.6	145
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	107	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	105	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6962269)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.25 µg/L	103	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	108	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	110	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	98.9	71.4	144
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6962278)								



Sub-Matrix: **WATER**

Sub-Matrix: WATER				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%) LCS	Acceptable Limits (%) Low High	
Method: Compound	CAS Number	LOR	Unit	Result				
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6962278) - continued								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.25 µg/L	105	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	112	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	119	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	102	71.4	144
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6962429)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.25 µg/L	104	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	109	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	96.8	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	92.1	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: **SOIL**

Sub-Matrix: SOIL				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6962652)							
ES2533521-059	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.00125 mg/kg	93.0	72.0	128
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.00125 mg/kg	87.3	73.0	123
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.00125 mg/kg	68.8	67.0	130
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.00125 mg/kg	85.6	70.0	132
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.00125 mg/kg	# Not Determined	68.0	136
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.00125 mg/kg	112	59.0	134
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6962652)							
ES2533521-059	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.00625 mg/kg	87.8	71.0	135
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.00125 mg/kg	79.8	69.0	132
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.00125 mg/kg	88.3	70.0	132
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.00125 mg/kg	82.4	71.0	131
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.00125 mg/kg	105	69.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.00125 mg/kg	91.6	72.0	129
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.00125 mg/kg	88.1	69.0	133
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.00125 mg/kg	89.3	64.0	136
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.00125 mg/kg	77.3	69.0	135
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.00125 mg/kg	78.6	66.0	139
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.00312 mg/kg	85.9	69.0	133



Sub-Matrix: **SOIL**

Sub-Matrix: SOIL				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: 6962652)							
ES2533521-059	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.00125 mg/kg	84.0	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.00312 mg/kg	125	71.6	129
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.00312 mg/kg	117	69.8	131
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.00312 mg/kg	117	68.7	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.00312 mg/kg	125	65.1	134
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.00125 mg/kg	119	63.0	144
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.00125 mg/kg	115	61.0	139
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6962652)							
ES2533521-059	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.00125 mg/kg	92.8	62.0	145
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.00125 mg/kg	118	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.00125 mg/kg	124	65.0	137
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.00125 mg/kg	102	69.2	143

Sub-Matrix: **WATER**

Sub-Matrix: WATER				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6962269)							
ES2533538-005	0021_SW052_251021	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.25 µg/L	104	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.25 µg/L	100	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.25 µg/L	93.8	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.25 µg/L	115	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.25 µg/L	93.0	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.25 µg/L	86.7	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6962278)							
ES2533597-001	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.25 µg/L	102	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.25 µg/L	101	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.25 µg/L	96.0	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	96.6	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.25 µg/L	102	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6962429)							
ES2533567-003	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	90.2	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.25 µg/L	92.2	68.0	131



Sub-Matrix: **WATER**

Sub-Matrix: WATER				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6962429) - continued							
ES2533567-003	Anonymous	EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.25 µg/L	119	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.25 µg/L	105	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.25 µg/L	94.6	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6962269)							
ES2533538-005	0021_SW052_251021	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	104	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	106	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	111	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	105	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	102	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	114	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	110	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	96.7	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	109	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTTrDA)	72629-94-8	0.25 µg/L	110	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	124	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6962278)							
ES2533597-001	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	101	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	103	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	109	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	103	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	102	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	108	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	103	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	117	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTTrDA)	72629-94-8	0.25 µg/L	108	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	114	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6962429)							
ES2533567-003	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	105	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	106	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	114	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	108	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	106	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	109	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	105	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	110	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	104	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTTrDA)	72629-94-8	0.25 µg/L	106	65.0	144



Sub-Matrix: **WATER**

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: 6962429) - continued							
ES2533567-003	Anonymous	EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	112	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6962269)							
ES2533538-005	0021_SW052_251021	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	101	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	124	66.0	145
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	115	57.6	145
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	105	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	101	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6962278)							
ES2533597-001	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	93.9	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	101	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	102	62.6	147
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	124	66.0	145
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	113	57.6	145
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	109	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	103	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6962429)							
ES2533567-003	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	103	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	95.6	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	88.9	62.6	147
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	120	66.0	145
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	116	57.6	145
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	112	65.0	136

Page : 19 of 19
 Work Order : ES2533538
 Client : GHD PTY LTD
 Project : ACT_0021_PFASOMP_25 / Jervis Bay Range Facility PFAS Ongoing Monitoring Program



Sub-Matrix: **WATER**

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: 6962429) - continued							
ES2533567-003	Anonymous	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: 6962269)							
ES2533538-005	0021_SW052_251021	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.25 µg/L	105	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.25 µg/L	111	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.25 µg/L	116	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.25 µg/L	109	71.4	144
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6962278)							
ES2533597-001	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.25 µg/L	105	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.25 µg/L	102	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.25 µg/L	117	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.25 µg/L	112	71.4	144
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6962429)							
ES2533567-003	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.25 µg/L	92.1	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.25 µg/L	105	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.25 µg/L	96.4	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.25 µg/L	98.3	71.4	144



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CHAIN OF CUSTODY RECORD

CLIENT DETAILS

Company Name : SHD Pty Ltd Sydney

Contact Name : Andrew Duvall

Purchase Order : 12626822

COC Number :

Office Address :

Project Manager : Helen Mace

PROJECT Number : ACF 4620 PFASQAP 25

Eurofins | mgf quote ID : CHD

Level 15, 133 Castlereagh Street Sydney NSW 2000

Email for results : andrew.duvall@shd.com.au, helen.mace@eurofins.com, helen.mace@eurofins.com, helen.mace@eurofins.com

PROJECT Name : HMAS Coxwell PFAS Drinking Monitoring Program

Data output format : ESDAT

Special Directions & Comments :

Analyses

Some common holding times (with correct preservation)

For further information contact the lab

Waters

So

Email invoice to: accounts@eurofins.com; steven.castillo@eurofins.com

BTEX, MAH, VOC	14 days	BTEX, MAH, VOC
TRH, PAH, Phenols, Pesticides	7 days	TRH, PAH, Phenols, Pesticides
Heavy Metals	6 months	Heavy Metals
Mercury, CrVI	28 days	Mercury, CrVI
Microbiological testing	24 hours	Microbiological testing
BOD, Nitrate, Nitrite, Total N	2 days	Anions
Solids - TSS, TDS etc	7 days	SPOCAS, pH Field and FOX, Cr
Ferrous Iron	7 days	ASLP, TCLP

Eurofins | mgf DI water batch number:

PFAS Full Suite - 30 compounds (standard level)

Containers:

500P	250P	60P	1LA	40mL vial	125P	Tub	40P

Sample ID	Date	Matrix	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 0020_QC200_251020	20 Oct 2025 08:32	W	X															
2 0020_QC201_251020	20 Oct 2025 12:37	S	X															
3 0020_QC205_251023	23 Oct 2025 07:08	W	X															
4 0020_QC220_251020	20 Oct 2025 10:32	W	X															
5 0020_QC221_251020	20 Oct 2025 13:10	W	X															
6 0020_QC222_251120	20 Oct 2025 15:53	W	X															
7 0020_QC240_251020	20 Oct 2025 16:03	W	X															
8 0020_QC250_251120	20 Oct 2025 08:59	W	X															
9																		
10																		
11																		
12																		
13																		
14																		
15																		
16																		

Relinquished By: Andrew Duvall via A/S Smithfield

Received By:

Laboratory Staff

Turn around time

Method Of Shipment

Courier

28/10/25 2:20PM 75°C

CM

1205219

Eurofins Environment Testing Australia Pty Ltd

ABN: 50 005 085 521

Eurofins ARL Pty Ltd

ABN: 91 05 0159 898

Melbourne 6 Monterey Road Dandenong South VIC 3175 +61 3 8564 5000 NATA# 1261 Site# 1254	Geelong 19/8 Lewalan Street Grovedale VIC 3216 +61 3 8564 5000 NATA# 1261 Site# 25403	Sydney 179 Magowar Road Girraween NSW 2145 +61 2 9900 8400 NATA# 1261 Site# 18217	Canberra Unit 1,2 Dacre Street Mitchell ACT 2911 +61 2 6113 8091 NATA# 1261 Site# 25466	Brisbane 1/21 Smallwood Place Murarrie QLD 4172 +61 7 3902 4600 NATA# 1261 Site# 20794 & 2780	Newcastle 1/2 Frost Drive Mayfield West NSW 2304 +61 2 4968 8448 NATA# 1261 Site# 25079	Perth 46-48 Banksia Road Welshpool WA 6106 +61 8 6253 4444 NATA# 2377 Site# 2370 & 2554

Sample Receipt Advice

Company name: GHD Pty Ltd NSW
Contact name: Helen Milne
Project name: HMAS CRESWELL PFAS ONGOING MONITORING PROGRAM
Project ID: ACT_0020_PFASOMP_25
Turnaround time: 5 Day
Date/Time received: Oct 28, 2025 2:20 PM
Eurofins reference: 1285219

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 : 7.5 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.
- ✗ Split sample sent to requested external lab.
- ✗ 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.

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: **Helen Milne**

Report **1285219-S-V2**

Project name **HMAS CRESWELL PFAS ONGOING MONITORING PROGRAM**

Project ID **ACT_0020_PFASOMP_25**

Received Date **Oct 28, 2025**

Client Sample ID			0020_QC201_2 51020
Sample Matrix			Soil
Eurofins Sample No.			S25- Oc0083732
Date Sampled			Oct 20, 2025
Test/Reference	LOR	Unit	
Sample Properties			
% Moisture	1	%	70
Perfluoroalkyl carboxylic acids (PFCAs)			
Perfluorobutanoic acid (PFBA) ^{N11}	5	ug/kg	< 5
Perfluoropentanoic acid (PFPeA) ^{N11}	5	ug/kg	< 5
Perfluorohexanoic acid (PFHxA) ^{N11}	5	ug/kg	< 5
Perfluoroheptanoic acid (PFHpA) ^{N11}	5	ug/kg	< 5
Perfluorooctanoic acid (PFOA) ^{N11}	5	ug/kg	< 5
Perfluorononanoic acid (PFNA) ^{N11}	5	ug/kg	< 5
Perfluorodecanoic acid (PFDA) ^{N11}	5	ug/kg	< 5
Perfluoroundecanoic acid (PFUnDA) ^{N11}	5	ug/kg	< 5
Perfluorododecanoic acid (PFDoDA) ^{N11}	5	ug/kg	< 5
Perfluorotridecanoic acid (PFTTrDA) ^{N15}	5	ug/kg	< 5
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	5	ug/kg	< 5
13C4-PFBA (surr.)	1	%	52
13C5-PFPeA (surr.)	1	%	74
13C5-PFHxA (surr.)	1	%	76
13C4-PFHpA (surr.)	1	%	66
13C8-PFOA (surr.)	1	%	55
13C5-PFNA (surr.)	1	%	60
13C6-PFDA (surr.)	1	%	51
13C2-PFUnDA (surr.)	1	%	59
13C2-PFDoDA (surr.)	1	%	71
13C2-PFTeDA (surr.)	1	%	62
Perfluoroalkyl sulfonamido substances			
Perfluorooctane sulfonamide (FOSA) ^{N11}	5	ug/kg	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	5	ug/kg	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	5	ug/kg	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE) ^{N11}	5	ug/kg	5.2
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE) ^{N11}	5	ug/kg	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	10	ug/kg	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	10	ug/kg	< 10

Client Sample ID			0020_QC201_2
Sample Matrix			Soil
Eurofins Sample No.			S25- Oc0083732
Date Sampled			Oct 20, 2025
Test/Reference	LOR	Unit	
Perfluoroalkyl sulfonamido substances			
13C8-FOSA (surr.)	1	%	63
D3-N-MeFOSA (surr.)	1	%	84
D5-N-EtFOSA (surr.)	1	%	76
D7-N-MeFOSE (surr.)	1	%	73
D9-N-EtFOSE (surr.)	1	%	68
D5-N-EtFOSAA (surr.)	1	%	82
D3-N-MeFOSAA (surr.)	1	%	43
Perfluoroalkyl sulfonic acids (PFASs)			
Perfluorobutanesulfonic acid (PFBS) ^{N11}	5	ug/kg	< 5
Perfluorononanesulfonic acid (PFNS) ^{N15}	5	ug/kg	< 5
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	5	ug/kg	< 5
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	5	ug/kg	< 5
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	5	ug/kg	< 5
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	5	ug/kg	< 5
Perfluorooctanesulfonic acid (PFOS) ^{N11}	5	ug/kg	^{N0939} < 5
Perfluorodecanesulfonic acid (PFDS) ^{N15}	5	ug/kg	< 5
13C3-PFBS (surr.)	1	%	91
18O2-PFHxS (surr.)	1	%	95
13C8-PFOS (surr.)	1	%	69
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	5	ug/kg	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA) ^{N11}	10	ug/kg	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	5	ug/kg	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	5	ug/kg	< 5
13C2-4:2 FTSA (surr.)	1	%	57
13C2-6:2 FTSA (surr.)	1	%	59
13C2-8:2 FTSA (surr.)	1	%	55
13C2-10:2 FTSA (surr.)	1	%	92
PFASs Summations			
Sum (PFHxS + PFOS)*	5	ug/kg	39
Sum of WA DWER PFAS (n=10)*	10	ug/kg	39
Sum of PFASs (n=30)*	50	ug/kg	< 50

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
% Moisture - Method: LTM-GEN-7080 Moisture	Sydney	Oct 28, 2025	14 Days
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Sydney	Nov 18, 2025	90 Days
Perfluoroalkyl sulfonamido substances - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Sydney	Nov 18, 2025	90 Days
Perfluoroalkyl sulfonic acids (PFSAs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Sydney	Nov 18, 2025	90 Days
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Sydney	Nov 18, 2025	90 Days



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NATA# 2377
Site# 2370 & 2554

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

Project Name: HMAS CRESWELL PFAS ONGOING MONITORING PROGRAM
Project ID: ACT_0020_PFASOMP_25

Order No.:
Report #: 1285219
Phone: 02 9239 7100
Fax: 02 9239 7199

Received: Oct 28, 2025 2:20 PM
Due: Nov 4, 2025
Priority: 5 Day
Contact Name: Helen Milne

Eurofins Analytical Services Manager : Adam Bateup

Sample Detail

Moisture Set

Per- and Polyfluoroalkyl Substances (PFASs)

Sydney Laboratory - NATA # 1261 Site # 18217

External Laboratory

No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID		
1	0020_QC200_251020	Oct 20, 2025		Water	S25-Oc0083731		X
2	0020_QC201_251020	Oct 20, 2025		Soil	S25-Oc0083732	X	X
3	0020_QC205_251023	Oct 23, 2025		Water	S25-Oc0083733		X
4	0020_QC220_251020	Oct 20, 2025		Water	S25-Oc0083734		X
5	0020_QC221_251020	Oct 20, 2025		Water	S25-Oc0083735		X
6	0020_QC222_251020	Oct 20, 2025		Water	S25-Oc0083736		X
7	0020_QC240_251020	Oct 20, 2025		Water	S25-Oc0083737		X
8	0020_QC260_251020	Oct 20, 2025		Water	S25-Oc0083738		X
Test Counts						1	8

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 (<i>bis</i> -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/kg	< 5			5	Pass	
Perfluoropentanoic acid (PFPeA)	ug/kg	< 5			5	Pass	
Perfluorohexanoic acid (PFHxA)	ug/kg	< 5			5	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/kg	< 5			5	Pass	
Perfluorooctanoic acid (PFOA)	ug/kg	< 5			5	Pass	
Perfluorononanoic acid (PFNA)	ug/kg	< 5			5	Pass	
Perfluorodecanoic acid (PFDA)	ug/kg	< 5			5	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/kg	< 5			5	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/kg	< 5			5	Pass	
Perfluorotridecanoic acid (PFTTrDA)	ug/kg	< 5			5	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/kg	< 5			5	Pass	
Method Blank							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	ug/kg	< 5			5	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/kg	< 5			5	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/kg	< 5			5	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	ug/kg	< 5			5	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	ug/kg	< 5			5	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/kg	< 10			10	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/kg	< 10			10	Pass	
Method Blank							
Perfluoroalkyl sulfonic acids (PFSA)s							
Perfluorobutanesulfonic acid (PFBS)	ug/kg	< 5			5	Pass	
Perfluorononanesulfonic acid (PFNS)	ug/kg	< 5			5	Pass	
Perfluoropropanesulfonic acid (PFPrS)	ug/kg	< 5			5	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/kg	< 5			5	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/kg	< 5			5	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/kg	< 5			5	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/kg	< 5			5	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/kg	< 5			5	Pass	
Method Blank							
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)s							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/kg	< 5			5	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	ug/kg	< 10			10	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/kg	< 5			5	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/kg	< 5			5	Pass	
LCS - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	%	102			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	116			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	121			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	123			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	96			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	107			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	98			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	90			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	110			50-150	Pass	
Perfluorotridecanoic acid (PFTTrDA)	%	113			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	127			50-150	Pass	

Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
LCS - % Recovery									
Perfluoroalkyl sulfonamido substances									
Perfluorooctane sulfonamide (FOSA)			%	121			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)			%	124			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)			%	146			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)			%	102			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)			%	119			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)			%	134			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)			%	121			50-150	Pass	
LCS - % Recovery									
Perfluoroalkyl sulfonic acids (PFSA's)									
Perfluorobutanesulfonic acid (PFBS)			%	121			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)			%	122			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)			%	123			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)			%	111			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)			%	118			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)			%	120			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)			%	119			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)			%	98			50-150	Pass	
LCS - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSA's)									
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)			%	126			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)			%	112			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)			%	129			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)			%	113			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-Oc0083732	CP	%	101			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	S25-Oc0083732	CP	%	143			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	S25-Oc0083732	CP	%	145			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	S25-Oc0083732	CP	%	122			50-150	Pass	
Perfluorooctanoic acid (PFOA)	S25-Oc0083732	CP	%	136			50-150	Pass	
Perfluorononanoic acid (PFNA)	S25-Oc0083732	CP	%	112			50-150	Pass	
Perfluorodecanoic acid (PFDA)	S25-Oc0083732	CP	%	112			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	S25-Oc0083732	CP	%	98			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	S25-Oc0083732	CP	%	115			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	S25-Oc0083732	CP	%	80			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	S25-Oc0083732	CP	%	83			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonamido substances									
				Result 1					
Perfluorooctane sulfonamide (FOSA)	S25-Oc0083732	CP	%	123			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	S25-Oc0083732	CP	%	106			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	S25-Oc0083732	CP	%	115			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	S25-Oc0083732	CP	%	127			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	S25-Oc0083732	CP	%	120			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-Oc0083732	CP	%	91			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	S25-Oc0083732	CP	%	91			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonic acids (PFASs)				Result 1					
Perfluorobutanesulfonic acid (PFBS)	S25-Oc0083732	CP	%	103			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	S25-Oc0083732	CP	%	118			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	S25-Oc0083732	CP	%	80			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	S25-Oc0083732	CP	%	83			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	S25-Oc0083732	CP	%	130			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	S25-Oc0083732	CP	%	128			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	S25-Oc0083732	CP	%	124			50-150	Pass	
Spike - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	S25-Oc0083732	CP	%	75			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	S25-Oc0083732	CP	%	132			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	S25-Oc0083732	CP	%	76			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	S25-Oc0083732	CP	%	71			50-150	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Sample Properties				Result 1	Result 2	RPD			
% Moisture	S25-Oc0084129	NCP	%	3.7	4.2	13	30%	Pass	
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	S25-Oc0049124	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	S25-Oc0049124	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	S25-Oc0049124	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	S25-Oc0049124	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	S25-Oc0049124	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	S25-Oc0049124	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	S25-Oc0049124	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	S25-Oc0049124	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	S25-Oc0049124	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	S25-Oc0049124	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	S25-Oc0049124	NCP	ug/kg	< 5	< 5	<1	30%	Pass	

Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	S25-Oc0049124	NCP	ug/kg	< 5	< 5	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	S25-Oc0049124	NCP	ug/kg	< 5	< 5	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	S25-Oc0049124	NCP	ug/kg	< 5	< 5	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	S25-Oc0049124	NCP	ug/kg	< 5	< 5	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	S25-Oc0049124	NCP	ug/kg	< 5	< 5	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	S25-Oc0049124	NCP	ug/kg	< 10	< 10	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	S25-Oc0049124	NCP	ug/kg	< 10	< 10	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSA's)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	S25-Oc0049124	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	S25-Oc0049124	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	S25-Oc0049124	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	S25-Oc0049124	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	S25-Oc0049124	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	S25-Oc0049124	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	S25-Oc0049124	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	S25-Oc0049124	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA's)				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	S25-Oc0049124	NCP	ug/kg	< 5	< 5	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	S25-Oc0049124	NCP	ug/kg	< 10	< 10	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	S25-Oc0049124	NCP	ug/kg	< 5	< 5	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	S25-Oc0049124	NCP	ug/kg	< 5	< 5	<1	30%	Pass

Comments

Report 1285219-S-V2 (amendment to report 1285219-S) has been issued with revised results for PFAS on sample 25-Oc0083732, following repeat analysis.

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:

Adam Bateup	Analytical Services Manager
Roopesh Rangarajan	Senior Analyst-PFAS
Ryan Phillips	Senior Analyst-Sample Properties



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](#).

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



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Accreditation Number 1261
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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: **Helen Milne**

Report **1285219-W-V2**

Project name **HMAS CRESWELL PFAS ONGOING MONITORING PROGRAM**

Project ID **ACT_0020_PFASOMP_25**

Received Date **Oct 28, 2025**

Client Sample ID			0020_QC200_2 51020	0020_QC205_2 51023	0020_QC220_2 51020	0020_QC221_2 51020
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S25- Oc0083731	S25- Oc0083733	S25- Oc0083734	S25- Oc0083735
Date Sampled			Oct 20, 2025	Oct 23, 2025	Oct 20, 2025	Oct 20, 2025
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA) ^{N11}	0.01	ug/L	0.03	< 0.01	< 0.01	0.02
Perfluoroheptanoic acid (PFHpA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) ^{N11}	0.01	ug/L	^{NO9} 0.02	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	92	92	88	88
13C5-PFPeA (surr.)	1	%	102	95	93	99
13C5-PFHxA (surr.)	1	%	114	107	103	104
13C4-PFHpA (surr.)	1	%	109	98	100	93
13C8-PFOA (surr.)	1	%	98	106	104	98
13C5-PFNA (surr.)	1	%	92	98	90	90
13C6-PFDA (surr.)	1	%	93	93	94	92
13C2-PFUnDA (surr.)	1	%	92	96	98	86
13C2-PFDoDA (surr.)	1	%	107	92	113	88
13C2-PFTeDA (surr.)	1	%	175	97	92	83
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	86	93	92	92
D3-N-MeFOSA (surr.)	1	%	43	99	84	90

Client Sample ID			0020_QC200_2 51020	0020_QC205_2 51023	0020_QC220_2 51020	0020_QC221_2 51020
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S25- Oc0083731	S25- Oc0083733	S25- Oc0083734	S25- Oc0083735
Date Sampled			Oct 20, 2025	Oct 23, 2025	Oct 20, 2025	Oct 20, 2025
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonamido substances						
D5-N-EtFOSA (surr.)	1	%	48	92	90	94
D7-N-MeFOSE (surr.)	1	%	71	82	85	85
D9-N-EtFOSE (surr.)	1	%	73	85	86	85
D5-N-EtFOSAA (surr.)	1	%	93	86	98	76
D3-N-MeFOSAA (surr.)	1	%	83	84	95	90
Perfluoroalkyl sulfonic acids (PFSA's)						
Perfluorobutanesulfonic acid (PFBS) ^{N11}	0.01	ug/L	0.02	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	0.01	ug/L	^{N09} 0.02	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	0.01	ug/L	^{N09} 0.22	^{N09} 0.08	< 0.01	^{N09} 0.07
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	0.01	ug/L	^{N09} 0.01	< 0.01	< 0.01	^{N09} 0.02
Perfluorooctanesulfonic acid (PFOS) ^{N11}	0.01	ug/L	^{N09} 0.37	^{N09} 0.11	^{N09} 0.01	^{N09} 0.43
Perfluorodecanesulfonic acid (PFDS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	113	109	104	103
18O2-PFHxS (surr.)	1	%	112	103	103	105
13C8-PFOS (surr.)	1	%	98	97	96	90
n:2 Fluorotelomer sulfonic acids (n:2 FTSA's)						
1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H,1H,2H,2H-perfluorooctanesulfonic acid(6:2 FTSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H,1H,2H,2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	122	98	90	91
13C2-6:2 FTSA (surr.)	1	%	95	96	90	90
13C2-8:2 FTSA (surr.)	1	%	105	106	95	83
13C2-10:2 FTSA (surr.)	1	%	101	87	105	90
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	0.59	0.19	0.01	0.5
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	0.66	0.19	< 0.05	0.52
Sum of PFASs (n=30)*	0.1	ug/L	0.7	0.2	< 0.1	0.5

Client Sample ID			0020_QC222_2 51020	0020_QC240_2 51020	0020_QC260_2 51020
Sample Matrix			Water	Water	Water
Eurofins Sample No.			S25- Oc0083736	S25- Oc0083737	S25- Oc0083738
Date Sampled			Oct 20, 2025	Oct 20, 2025	Oct 20, 2025
Test/Reference	LOR	Unit			
Perfluoroalkyl carboxylic acids (PFCAs)					
Perfluorobutanoic acid (PFBA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) ^{N11}	0.01	ug/L	< 0.01	0.02	< 0.01
Perfluorohexanoic acid (PFHxA) ^{N11}	0.01	ug/L	< 0.01	0.05	< 0.01
Perfluoroheptanoic acid (PFHpA) ^{N11}	0.01	ug/L	< 0.01	^{N09} 0.01	< 0.01
Perfluorooctanoic acid (PFOA) ^{N11}	0.01	ug/L	< 0.01	^{N09} 0.02	< 0.01
Perfluorononanoic acid (PFNA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01

Client Sample ID			0020_QC222_2 51020	0020_QC240_2 51020	0020_QC260_2 51020
Sample Matrix			Water	Water	Water
Eurofins Sample No.			S25- Oc0083736	S25- Oc0083737	S25- Oc0083738
Date Sampled			Oct 20, 2025	Oct 20, 2025	Oct 20, 2025
Test/Reference	LOR	Unit			
Perfluoroalkyl carboxylic acids (PFCAs)					
Perfluorodecanoic acid (PFDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	92	91	96
13C5-PFPeA (surr.)	1	%	94	100	104
13C5-PFHxA (surr.)	1	%	109	102	116
13C4-PFHpA (surr.)	1	%	96	100	111
13C8-PFOA (surr.)	1	%	108	101	114
13C5-PFNA (surr.)	1	%	92	100	118
13C6-PFDA (surr.)	1	%	97	92	121
13C2-PFUnDA (surr.)	1	%	92	91	135
13C2-PFDoDA (surr.)	1	%	87	89	132
13C2-PFTeDA (surr.)	1	%	85	93	137
Perfluoroalkyl sulfonamido substances					
Perfluorooctane sulfonamide (FOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	90	89	70
D3-N-MeFOSA (surr.)	1	%	91	88	87
D5-N-EtFOSA (surr.)	1	%	90	95	92
D7-N-MeFOSE (surr.)	1	%	83	84	80
D9-N-EtFOSE (surr.)	1	%	84	87	90
D5-N-EtFOSAA (surr.)	1	%	77	81	163
D3-N-MeFOSAA (surr.)	1	%	80	83	119
Perfluoroalkyl sulfonic acids (PFSAs)					
Perfluorobutanesulfonic acid (PFBS) ^{N11}	0.01	ug/L	< 0.01	0.01	< 0.01
Perfluorononanesulfonic acid (PFNS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	0.04
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	0.01	ug/L	< 0.01	^{N09} 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	0.01	ug/L	^{N09} 0.06	^{N09} 0.27	^{N09} 0.17
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	0.01	ug/L	< 0.01	^{N09} 0.04	^{N09} 0.02
Perfluorooctanesulfonic acid (PFOS) ^{N11}	0.01	ug/L	^{N09} 0.05	^{N09} 0.92	^{N09} 1.0
Perfluorodecanesulfonic acid (PFDS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	109	110	107
18O2-PFHxS (surr.)	1	%	101	109	113
13C8-PFOS (surr.)	1	%	101	94	108

Client Sample ID			0020_QC222_2 51020	0020_QC240_2 51020	0020_QC260_2 51020
Sample Matrix			Water	Water	Water
Eurofins Sample No.			S25- Oc0083736	S25- Oc0083737	S25- Oc0083738
Date Sampled			Oct 20, 2025	Oct 20, 2025	Oct 20, 2025
Test/Reference	LOR	Unit			
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	95	107	145
13C2-6:2 FTSA (surr.)	1	%	98	96	155
13C2-8:2 FTSA (surr.)	1	%	104	95	155
13C2-10:2 FTSA (surr.)	1	%	86	84	INT
PFASs Summations					
Sum (PFHxS + PFOS)*	0.01	ug/L	0.11	1.19	1.17
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	0.11	1.3	1.17
Sum of PFASs (n=30)*	0.1	ug/L	0.1	1.4	1.2

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	Oct 31, 2025	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Sydney	Oct 31, 2025	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Sydney	Oct 31, 2025	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Sydney	Oct 31, 2025	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			



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Project Name: HMAS CRESWELL PFAS ONGOING MONITORING PROGRAM
Project ID: ACT_0020_PFASOMP_25

Order No.:
Report #: 1285219
Phone: 02 9239 7100
Fax: 02 9239 7199

Received: Oct 28, 2025 2:20 PM
Due: Nov 4, 2025
Priority: 5 Day
Contact Name: Helen Milne

Eurofins Analytical Services Manager : Adam Bateup

Sample Detail						Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)
Sydney Laboratory - NATA # 1261 Site # 18217						X	X
External Laboratory							
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID		
1	0020_QC200_251020	Oct 20, 2025		Water	S25-Oc0083731		X
2	0020_QC201_251020	Oct 20, 2025		Soil	S25-Oc0083732	X	X
3	0020_QC205_251023	Oct 23, 2025		Water	S25-Oc0083733		X
4	0020_QC220_251020	Oct 20, 2025		Water	S25-Oc0083734		X
5	0020_QC221_251020	Oct 20, 2025		Water	S25-Oc0083735		X
6	0020_QC222_251020	Oct 20, 2025		Water	S25-Oc0083736		X
7	0020_QC240_251020	Oct 20, 2025		Water	S25-Oc0083737		X
8	0020_QC260_251020	Oct 20, 2025		Water	S25-Oc0083738		X
Test Counts						1	8

Internal Quality Control Review and Glossary

General

- 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.
- Unless otherwise stated, all soil/sediment/solid results are reported on a dry weight basis.
- Unless otherwise stated, all biota/food results are reported on a wet weight basis on the edible portion.
- For CEC results where the sample's origin is unknown or environmentally contaminated, the results should be used advisedly.
- Actual LORs are matrix dependent. Quoted LORs may be raised where sample extracts are diluted due to interferences.
- Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds where annotated.
- SVOC analysis on waters is performed on homogenised, unfiltered samples unless noted otherwise.
- Samples were analysed on an 'as received' basis.
- Information identified in this report with **blue** colour indicates data provided by customers that may have an impact on the results.
- 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 (<i>bis</i> -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

- 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.
- 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.
- 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.
- Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery, the term "INT" appears against that analyte.
- For Matrix Spikes and LCS results, a dash "-" in the report means that the specific analyte was not added to the QC sample.
- 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 (PFTTrDA)	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 (PFSA)s							
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 FTSA)s							
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)	%	105			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	107			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	115			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	112			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	104			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	110			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	118			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	117			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	112			50-150	Pass	
Perfluorotridecanoic acid (PFTTrDA)	%	121			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	115			50-150	Pass	

Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
LCS - % Recovery									
Perfluoroalkyl sulfonamido substances									
Perfluorooctane sulfonamide (FOSA)			%	115			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)			%	116			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)			%	114			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)			%	126			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)			%	119			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)			%	111			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)			%	119			50-150	Pass	
LCS - % Recovery									
Perfluoroalkyl sulfonic acids (PFSA's)									
Perfluorobutanesulfonic acid (PFBS)			%	110			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)			%	107			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)			%	106			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)			%	94			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)			%	103			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)			%	120			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)			%	101			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)			%	109			50-150	Pass	
LCS - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSA's)									
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)			%	112			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)			%	121			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)			%	108			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)			%	123			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-Oc0077023	NCP	%	108			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	S25-Oc0077023	NCP	%	108			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	S25-Oc0077023	NCP	%	108			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	S25-Oc0077023	NCP	%	101			50-150	Pass	
Perfluorooctanoic acid (PFOA)	S25-Oc0077023	NCP	%	123			50-150	Pass	
Perfluorononanoic acid (PFNA)	S25-Oc0077023	NCP	%	103			50-150	Pass	
Perfluorodecanoic acid (PFDA)	S25-Oc0077023	NCP	%	117			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	S25-Oc0077023	NCP	%	117			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	S25-Oc0077023	NCP	%	121			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	S25-Oc0077023	NCP	%	126			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	S25-Oc0077023	NCP	%	113			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonamido substances									
				Result 1					
Perfluorooctane sulfonamide (FOSA)	S25-Oc0077023	NCP	%	119			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	S25-Oc0077023	NCP	%	131			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	S25-Oc0077023	NCP	%	109			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	S25-Oc0077023	NCP	%	119			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	S25-Oc0077023	NCP	%	125			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-Oc0077023	NCP	%	100			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	S25-Oc0077023	NCP	%	112			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonic acids (PFSA's)				Result 1					
Perfluorobutanesulfonic acid (PFBS)	S25-Oc0077023	NCP	%	107			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	S25-Oc0077023	NCP	%	109			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	S25-Oc0077023	NCP	%	106			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	S25-Oc0077023	NCP	%	91			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	S25-Oc0077023	NCP	%	104			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	S25-Oc0077023	NCP	%	118			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	S25-Oc0077023	NCP	%	107			50-150	Pass	
Spike - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSA's)				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	S25-Oc0077023	NCP	%	125			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	S25-Oc0077023	NCP	%	109			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	S25-Oc0077023	NCP	%	98			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	S25-Oc0077023	NCP	%	114			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-Oc0083731	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	S25-Oc0083731	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	S25-Oc0083731	CP	ug/L	0.03	0.03	15	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	S25-Oc0083731	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	S25-Oc0083731	CP	ug/L	0.02	0.01	9.0	30%	Pass	
Perfluorononanoic acid (PFNA)	S25-Oc0083731	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	S25-Oc0083731	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	S25-Oc0083731	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	S25-Oc0083731	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	S25-Oc0083731	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	S25-Oc0083731	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	

Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	S25-Oc0083731	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	S25-Oc0083731	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	S25-Oc0083731	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	S25-Oc0083731	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	S25-Oc0083731	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	S25-Oc0083731	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	S25-Oc0083731	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	S25-Oc0083731	CP	ug/L	0.02	0.02	1.0	30%	Pass
Perfluorononanesulfonic acid (PFNS)	S25-Oc0083731	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	S25-Oc0083731	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	S25-Oc0083731	CP	ug/L	0.02	0.02	5.0	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	S25-Oc0083731	CP	ug/L	0.22	0.23	4.0	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	S25-Oc0083731	CP	ug/L	0.01	0.01	4.0	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	S25-Oc0083731	CP	ug/L	0.37	0.39	5.0	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	S25-Oc0083731	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	S25-Oc0083731	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	S25-Oc0083731	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	S25-Oc0083731	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	S25-Oc0083731	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD		
Perfluorobutanoic acid (PFBA)	S25-Oc0083738	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Perfluoropentanoic acid (PFPeA)	S25-Oc0083738	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanoic acid (PFHxA)	S25-Oc0083738	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanoic acid (PFHpA)	S25-Oc0083738	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanoic acid (PFOA)	S25-Oc0083738	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanoic acid (PFNA)	S25-Oc0083738	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanoic acid (PFDA)	S25-Oc0083738	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroundecanoic acid (PFUnDA)	S25-Oc0083738	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorododecanoic acid (PFDoDA)	S25-Oc0083738	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorotridecanoic acid (PFTrDA)	S25-Oc0083738	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorotetradecanoic acid (PFTeDA)	S25-Oc0083738	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass

Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	S25-Oc0083738	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	S25-Oc0083738	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	S25-Oc0083738	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	S25-Oc0083738	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	S25-Oc0083738	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	S25-Oc0083738	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	S25-Oc0083738	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	S25-Oc0083738	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	S25-Oc0083738	CP	ug/L	0.04	0.04	17	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	S25-Oc0083738	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	S25-Oc0083738	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	S25-Oc0083738	CP	ug/L	0.17	0.15	13	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	S25-Oc0083738	CP	ug/L	0.02	0.02	12	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	S25-Oc0083738	CP	ug/L	1.0	0.85	17	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	S25-Oc0083738	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	S25-Oc0083738	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	S25-Oc0083738	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	S25-Oc0083738	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	S25-Oc0083738	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass

Comments

Report 1285219-W-V2 (amendment to report 1285219-W) has been issued with revised results for PFAS on sample 25-Oc0083732, following repeat analysis.

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:

Adam Bateup 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](#).

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Melbourne 6 Monterey Road Dandenong South VIC 3175 +61 3 8564 5000 NATA# 1261 Site# 1254	Geelong 19/8 Lewalan Street Grovedale VIC 3216 +61 3 8564 5000 NATA# 1261 Site# 25403	Sydney 179 Magowar Road Girraween NSW 2145 +61 2 9900 8400 NATA# 1261 Site# 18217	Canberra Unit 1,2 Dacre Street Mitchell ACT 2911 +61 2 6113 8091 NATA# 1261 Site# 25466	Brisbane 1/21 Smallwood Place Murarrie QLD 4172 +61 7 3902 4600 NATA# 1261 Site# 20794 & 2780	Newcastle 1/2 Frost Drive Mayfield West NSW 2304 +61 2 4968 8448 NATA# 1261 Site# 25079	Perth 46-48 Banksia Road Welshpool WA 6106 +61 8 6253 4444 NATA# 2377 Site# 2370 & 2554

Sample Receipt Advice

Company name: GHD Pty Ltd NSW
Contact name: Steven Castillo
Project name: JERVIS BAY RANGE FACILITY PFAS ONGOING MONITORING
Project ID: ACT_0021_PFASOMP_25
Turnaround time: 5 Day
Date/Time received: Oct 28, 2025 6:00 PM
Eurofins reference: 1285374

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 : 13.1 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.
- ✗ Split sample sent to requested external lab.
- ✗ Some samples have been subcontracted.
- N/A Custody Seals intact (if used).

Notes

Samples received by the laboratory after 5.30pm are deemed to have been received the following working day.

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 Steven Castillo - steven.castillo@ghd.com.

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

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: **Steven Castillo**

Report **1285374-S**
Project name **JERVIS BAY RANGE FACILITY PFAS ONGOING MONITORING**
Project ID **ACT_0021_PFASOMP_25**
Received Date **Oct 28, 2025**

Client Sample ID			0021_QC226_2 51022
Sample Matrix			Soil
Eurofins Sample No.			S25- Oc0084584
Date Sampled			Oct 22, 2025
Test/Reference	LOR	Unit	
Sample Properties			
% Moisture	1	%	42
Perfluoroalkyl carboxylic acids (PFCAs)			
Perfluorobutanoic acid (PFBA) ^{N11}	5	ug/kg	< 5
Perfluoropentanoic acid (PFPeA) ^{N11}	5	ug/kg	< 5
Perfluorohexanoic acid (PFHxA) ^{N11}	5	ug/kg	< 5
Perfluoroheptanoic acid (PFHpA) ^{N11}	5	ug/kg	< 5
Perfluorooctanoic acid (PFOA) ^{N11}	5	ug/kg	< 5
Perfluorononanoic acid (PFNA) ^{N11}	5	ug/kg	< 5
Perfluorodecanoic acid (PFDA) ^{N11}	5	ug/kg	< 5
Perfluoroundecanoic acid (PFUnDA) ^{N11}	5	ug/kg	< 5
Perfluorododecanoic acid (PFDoDA) ^{N11}	5	ug/kg	< 5
Perfluorotridecanoic acid (PFTTrDA) ^{N15}	5	ug/kg	< 5
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	5	ug/kg	< 5
13C4-PFBA (surr.)	1	%	72
13C5-PFPeA (surr.)	1	%	72
13C5-PFHxA (surr.)	1	%	77
13C4-PFHpA (surr.)	1	%	58
13C8-PFOA (surr.)	1	%	56
13C5-PFNA (surr.)	1	%	62
13C6-PFDA (surr.)	1	%	72
13C2-PFUnDA (surr.)	1	%	64
13C2-PFDoDA (surr.)	1	%	73
13C2-PFTeDA (surr.)	1	%	58
Perfluoroalkyl sulfonamido substances			
Perfluorooctane sulfonamide (FOSA) ^{N11}	5	ug/kg	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	5	ug/kg	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	5	ug/kg	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE) ^{N11}	5	ug/kg	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE) ^{N11}	5	ug/kg	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	10	ug/kg	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	10	ug/kg	< 10

Client Sample ID			0021_QC226_2
Sample Matrix			Soil
Eurofins Sample No.			S25- Oc0084584
Date Sampled			Oct 22, 2025
Test/Reference	LOR	Unit	
Perfluoroalkyl sulfonamido substances			
13C8-FOSA (surr.)	1	%	63
D3-N-MeFOSA (surr.)	1	%	82
D5-N-EtFOSA (surr.)	1	%	78
D7-N-MeFOSE (surr.)	1	%	78
D9-N-EtFOSE (surr.)	1	%	70
D5-N-EtFOSAA (surr.)	1	%	66
D3-N-MeFOSAA (surr.)	1	%	57
Perfluoroalkyl sulfonic acids (PFSA's)			
Perfluorobutanesulfonic acid (PFBS) ^{N11}	5	ug/kg	< 5
Perfluorononanesulfonic acid (PFNS) ^{N15}	5	ug/kg	< 5
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	5	ug/kg	< 5
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	5	ug/kg	< 5
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	5	ug/kg	< 5
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	5	ug/kg	< 5
Perfluorooctanesulfonic acid (PFOS) ^{N11}	5	ug/kg	^{N09} 12
Perfluorodecanesulfonic acid (PFDS) ^{N15}	5	ug/kg	< 5
13C3-PFBS (surr.)	1	%	91
18O2-PFHxS (surr.)	1	%	70
13C8-PFOS (surr.)	1	%	61
n:2 Fluorotelomer sulfonic acids (n:2 FTSA's)			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	5	ug/kg	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA) ^{N11}	10	ug/kg	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	5	ug/kg	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	5	ug/kg	< 5
13C2-4:2 FTSA (surr.)	1	%	55
13C2-6:2 FTSA (surr.)	1	%	60
13C2-8:2 FTSA (surr.)	1	%	57
13C2-10:2 FTSA (surr.)	1	%	68
PFASs Summations			
Sum (PFHxS + PFOS)*	5	ug/kg	12
Sum of WA DWER PFAS (n=10)*	10	ug/kg	12
Sum of PFASs (n=30)*	50	ug/kg	< 50

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
% Moisture - Method: LTM-GEN-7080 Moisture	Sydney	Oct 28, 2025	14 Days
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Sydney	Oct 30, 2025	90 Days
Perfluoroalkyl sulfonamido substances - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Sydney	Oct 30, 2025	90 Days
Perfluoroalkyl sulfonic acids (PFSAs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Sydney	Oct 30, 2025	90 Days
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs) - Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)	Sydney	Oct 30, 2025	90 Days



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

Order No.:
Report #: 1285374
Phone: 02 9239 7100
Fax: 02 9239 7199

Received: Oct 28, 2025 6:00 PM
Due: Nov 4, 2025
Priority: 5 Day
Contact Name: Steven Castillo

Project Name: JERVIS BAY RANGE FACILITY PFAS ONGOING MONITORING
Project ID: ACT_0021_PFASOMP_25

Eurofins Analytical Services Manager : Adam Bateup

Sample Detail						HOLD*	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X
External Laboratory								
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID			
1	0021_QC202_251021	Oct 21, 2025	7:54AM	Water	S25-Oc0084579			X
2	0021_QC203_251021	Oct 21, 2025	10:55AM	Water	S25-Oc0084580			X
3	0021_QC204_251022	Oct 22, 2025	1:50PM	Water	S25-Oc0084581			X
4	0021_QC223_251021	Oct 21, 2025	10:59AM	Water	S25-Oc0084582			X
5	0021_QC224_251021	Oct 21, 2025	2:48PM	Water	S25-Oc0084583			X
6	0021_QC226_251022	Oct 22, 2025	10:50AM	Soil	S25-Oc0084584		X	X
7	0021_QC240_251021	Oct 21, 2025	11:45AM	Water	S25-Oc0084585			X
8	0021_QC241_251022	Oct 22, 2025	11:38AM	Water	S25-Oc0084586			X
9	0021_QC261_	Oct 21, 2025	9:27AM	Water	S25-Oc0084587			X



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Company Name:	GHD Pty Ltd NSW	Order No.:		Received:	Oct 28, 2025 6:00 PM
Address:	Level 15, 133 Castlereagh Street Sydney NSW 2000	Report #:	1285374	Due:	Nov 4, 2025
		Phone:	02 9239 7100	Priority:	5 Day
		Fax:	02 9239 7199	Contact Name:	Steven Castillo
Project Name:	JERVIS BAY RANGE FACILITY PFAS ONGOING MONITORING				
Project ID:	ACT_0021_PFASOMP_25				
Eurofins Analytical Services Manager : Adam Bateup					

Sample Detail						HOLD*	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X
	251021							
10	0021_QC262_251021	Oct 21, 2025	3:03PM	Water	S25-Oc0084588			X
11	0021_QC265_251022	Oct 22, 2025	2:15PM	Water	S25-Oc0084589			X
12	0021_QC266_251023	Oct 23, 2025	11:27AM	Water	S25-Oc0084590			X
13	0021_QC225_251022	Oct 22, 2025	8:38AM	Water	S25-Oc0084591	X		
14	0021_QC227_251022	Oct 22, 2025	3:46PM	Water	S25-Oc0084592	X		
15	0021_QC242_251022	Oct 22, 2025	3:18PM	Water	S25-Oc0084593	X		
Test Counts						3	1	12



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 (<i>bis</i> -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/kg	< 5			5	Pass	
Perfluoropentanoic acid (PFPeA)	ug/kg	< 5			5	Pass	
Perfluorohexanoic acid (PFHxA)	ug/kg	< 5			5	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/kg	< 5			5	Pass	
Perfluorooctanoic acid (PFOA)	ug/kg	< 5			5	Pass	
Perfluorononanoic acid (PFNA)	ug/kg	< 5			5	Pass	
Perfluorodecanoic acid (PFDA)	ug/kg	< 5			5	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/kg	< 5			5	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/kg	< 5			5	Pass	
Perfluorotridecanoic acid (PFTTrDA)	ug/kg	< 5			5	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/kg	< 5			5	Pass	
Method Blank							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	ug/kg	< 5			5	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/kg	< 5			5	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/kg	< 5			5	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	ug/kg	< 5			5	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	ug/kg	< 5			5	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/kg	< 10			10	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/kg	< 10			10	Pass	
Method Blank							
Perfluoroalkyl sulfonic acids (PFSA's)							
Perfluorobutanesulfonic acid (PFBS)	ug/kg	< 5			5	Pass	
Perfluorononanesulfonic acid (PFNS)	ug/kg	< 5			5	Pass	
Perfluoropropanesulfonic acid (PFPrS)	ug/kg	< 5			5	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/kg	< 5			5	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/kg	< 5			5	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/kg	< 5			5	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/kg	< 5			5	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/kg	< 5			5	Pass	
Method Blank							
n:2 Fluorotelomer sulfonic acids (n:2 FTSA's)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/kg	< 5			5	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	ug/kg	< 10			10	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/kg	< 5			5	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/kg	< 5			5	Pass	
LCS - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	%	112			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	139			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	114			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	107			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	121			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	113			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	120			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	105			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	113			50-150	Pass	
Perfluorotridecanoic acid (PFTTrDA)	%	123			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	129			50-150	Pass	

Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
LCS - % Recovery									
Perfluoroalkyl sulfonamido substances									
Perfluorooctane sulfonamide (FOSA)			%	104			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)			%	86			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)			%	124			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)			%	109			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)			%	106			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)			%	115			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)			%	130			50-150	Pass	
LCS - % Recovery									
Perfluoroalkyl sulfonic acids (PFSA's)									
Perfluorobutanesulfonic acid (PFBS)			%	108			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)			%	111			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)			%	85			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)			%	81			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)			%	109			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)			%	118			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)			%	111			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)			%	111			50-150	Pass	
LCS - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSA's)									
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)			%	118			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)			%	114			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)			%	111			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)			%	114			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-Oc0049134	NCP	%	107			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	S25-Oc0049134	NCP	%	144			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	S25-Oc0049134	NCP	%	111			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	S25-Oc0049134	NCP	%	110			50-150	Pass	
Perfluorooctanoic acid (PFOA)	S25-Oc0049134	NCP	%	109			50-150	Pass	
Perfluorononanoic acid (PFNA)	S25-Oc0049134	NCP	%	106			50-150	Pass	
Perfluorodecanoic acid (PFDA)	S25-Oc0049134	NCP	%	106			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	S25-Oc0049134	NCP	%	101			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	S25-Oc0049134	NCP	%	103			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	S25-Oc0049134	NCP	%	119			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	S25-Oc0049134	NCP	%	130			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonamido substances									
				Result 1					
Perfluorooctane sulfonamide (FOSA)	S25-Oc0049134	NCP	%	100			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	S25-Oc0049134	NCP	%	91			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	S25-Oc0049134	NCP	%	100			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	S25-Oc0049134	NCP	%	96			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	S25-Oc0049134	NCP	%	130			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-Oc0049134	NCP	%	141			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	S25-Oc0049134	NCP	%	117			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonic acids (PFSA's)				Result 1					
Perfluorobutanesulfonic acid (PFBS)	S25-Oc0049134	NCP	%	108			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	S25-Oc0049134	NCP	%	113			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	S25-Oc0049134	NCP	%	80			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	S25-Oc0049134	NCP	%	79			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	S25-Oc0049134	NCP	%	98			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	S25-Oc0049134	NCP	%	123			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	S25-Oc0049134	NCP	%	110			50-150	Pass	
Spike - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSA's)				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	S25-Oc0049134	NCP	%	99			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	S25-Oc0049134	NCP	%	125			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	S25-Oc0049134	NCP	%	139			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	S25-Oc0049134	NCP	%	83			50-150	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Sample Properties				Result 1	Result 2	RPD			
% Moisture	R25-Oc0078209	NCP	%	54	53	<1	30%	Pass	
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	S25-Oc0084584	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	S25-Oc0084584	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	S25-Oc0084584	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	S25-Oc0084584	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	S25-Oc0084584	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	S25-Oc0084584	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	S25-Oc0084584	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	S25-Oc0084584	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	S25-Oc0084584	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	S25-Oc0084584	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	S25-Oc0084584	CP	ug/kg	< 5	< 5	<1	30%	Pass	

Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	S25-Oc0084584	CP	ug/kg	< 5	< 5	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	S25-Oc0084584	CP	ug/kg	< 5	< 5	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	S25-Oc0084584	CP	ug/kg	< 5	< 5	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	S25-Oc0084584	CP	ug/kg	< 5	< 5	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	S25-Oc0084584	CP	ug/kg	< 5	< 5	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	S25-Oc0084584	CP	ug/kg	< 10	< 10	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	S25-Oc0084584	CP	ug/kg	< 10	< 10	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	S25-Oc0084584	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	S25-Oc0084584	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	S25-Oc0084584	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	S25-Oc0084584	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	S25-Oc0084584	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	S25-Oc0084584	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	S25-Oc0084584	CP	ug/kg	12	6.4	65	30%	Fail
Perfluorodecanesulfonic acid (PFDS)	S25-Oc0084584	CP	ug/kg	< 5	< 5	<1	30%	Pass
Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	S25-Oc0084584	CP	ug/kg	< 5	< 5	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	S25-Oc0084584	CP	ug/kg	< 10	< 10	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	S25-Oc0084584	CP	ug/kg	< 5	< 5	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	S25-Oc0084584	CP	ug/kg	< 5	< 5	<1	30%	Pass

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	No
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).
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised by:

Nileshni Goundar	Analytical Services Manager
Ryan Phillips	Senior Analyst-Sample Properties
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](#).

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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
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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: Steven Castillo

Report 1285374-W
Project name JERVIS BAY RANGE FACILITY PFAS ONGOING MONITORING
Project ID ACT_0021_PFASOMP_25
Received Date Oct 28, 2025

Client Sample ID			0021_QC202_2 51021	0021_QC203_2 51021	0021_QC204_2 51022	0021_QC223_2 51021
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S25- Oc0084579	S25- Oc0084580	S25- Oc0084581	S25- Oc0084582
Date Sampled			Oct 21, 2025	Oct 21, 2025	Oct 22, 2025	Oct 21, 2025
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	0.01	< 0.01
Perfluorohexanoic acid (PFHxA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	0.03	0.01
Perfluoroheptanoic acid (PFHpA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	61	47	72	92
13C5-PFPeA (surr.)	1	%	66	52	80	107
13C5-PFHxA (surr.)	1	%	74	56	85	111
13C4-PFHpA (surr.)	1	%	70	52	79	91
13C8-PFOA (surr.)	1	%	69	56	95	117
13C5-PFNA (surr.)	1	%	72	47	78	106
13C6-PFDA (surr.)	1	%	66	51	80	113
13C2-PFUnDA (surr.)	1	%	63	50	82	116
13C2-PFDoDA (surr.)	1	%	64	59	76	115
13C2-PFTeDA (surr.)	1	%	59	51	81	101
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	61	49	74	88
D3-N-MeFOSA (surr.)	1	%	58	49	36	88

Client Sample ID			0021_QC202_2 51021	0021_QC203_2 51021	0021_QC204_2 51022	0021_QC223_2 51021
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S25- Oc0084579	S25- Oc0084580	S25- Oc0084581	S25- Oc0084582
Date Sampled			Oct 21, 2025	Oct 21, 2025	Oct 22, 2025	Oct 21, 2025
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonamido substances						
D5-N-EtFOSA (surr.)	1	%	66	51	38	91
D7-N-MeFOSE (surr.)	1	%	52	45	65	79
D9-N-EtFOSE (surr.)	1	%	53	41	70	83
D5-N-EtFOSAA (surr.)	1	%	52	40	71	106
D3-N-MeFOSAA (surr.)	1	%	59	44	70	90
Perfluoroalkyl sulfonic acids (PFSA's)						
Perfluorobutanesulfonic acid (PFBS) ^{N11}	0.01	ug/L	< 0.01	< 0.01	0.02	< 0.01
Perfluorononanesulfonic acid (PFNS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	0.01	ug/L	^{N09} 0.08	< 0.01	< 0.01	^{N09} 0.04
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS) ^{N11}	0.01	ug/L	^{N09} 0.15	< 0.01	< 0.01	^{N09} 0.07
Perfluorodecanesulfonic acid (PFDS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	69	57	86	123
18O2-PFHxS (surr.)	1	%	77	58	96	118
13C8-PFOS (surr.)	1	%	74	54	85	113
n:2 Fluorotelomer sulfonic acids (n:2 FTSA's)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	91	68	93	136
13C2-6:2 FTSA (surr.)	1	%	59	48	96	109
13C2-8:2 FTSA (surr.)	1	%	66	56	86	104
13C2-10:2 FTSA (surr.)	1	%	61	41	99	146
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	0.23	< 0.01	< 0.01	0.11
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	0.23	< 0.05	0.06	0.12
Sum of PFASs (n=30)*	0.1	ug/L	0.2	< 0.1	< 0.1	0.1

Client Sample ID			0021_QC224_2 51021	0021_QC240_2 51021	0021_QC241_2 51022	0021_QC261_2 51021
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S25- Oc0084583	S25- Oc0084585	S25- Oc0084586	S25- Oc0084587
Date Sampled			Oct 21, 2025	Oct 21, 2025	Oct 22, 2025	Oct 21, 2025
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA) ^{N11}	0.01	ug/L	< 0.01	0.03	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01

Client Sample ID			0021_QC224_2 51021	0021_QC240_2 51021	0021_QC241_2 51022	0021_QC261_2 51021
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S25- Oc0084583	S25- Oc0084585	S25- Oc0084586	S25- Oc0084587
Date Sampled			Oct 21, 2025	Oct 21, 2025	Oct 22, 2025	Oct 21, 2025
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorodecanoic acid (PFDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	54	72	56	63
13C5-PFPeA (surr.)	1	%	62	76	56	68
13C5-PFHxA (surr.)	1	%	53	85	69	78
13C4-PFHpA (surr.)	1	%	52	75	65	75
13C8-PFOA (surr.)	1	%	59	86	63	72
13C5-PFNA (surr.)	1	%	51	77	59	67
13C6-PFDA (surr.)	1	%	55	77	60	68
13C2-PFUnDA (surr.)	1	%	46	72	57	70
13C2-PFDoDA (surr.)	1	%	49	75	59	68
13C2-PFTeDA (surr.)	1	%	51	71	63	60
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	49	74	60	64
D3-N-MeFOSA (surr.)	1	%	51	66	51	66
D5-N-EtFOSA (surr.)	1	%	47	72	56	67
D7-N-MeFOSE (surr.)	1	%	43	61	49	55
D9-N-EtFOSE (surr.)	1	%	43	61	50	58
D5-N-EtFOSAA (surr.)	1	%	43	72	48	59
D3-N-MeFOSAA (surr.)	1	%	45	66	56	64
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS) ^{N11}	0.01	ug/L	< 0.01	0.02	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	0.01	ug/L	< 0.01	^{N09} 0.03	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	0.01	ug/L	< 0.01	^{N09} 0.46	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	0.01	ug/L	< 0.01	^{N09} 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS) ^{N11}	0.01	ug/L	< 0.01	^{N09} 0.45	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	57	84	72	76
18O2-PFHxS (surr.)	1	%	57	89	74	79
13C8-PFOS (surr.)	1	%	53	75	67	74

Client Sample ID			0021_QC224_2_51021	0021_QC240_2_51021	0021_QC241_2_51022	0021_QC261_2_51021
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S25-Oc0084583	S25-Oc0084585	S25-Oc0084586	S25-Oc0084587
Date Sampled			Oct 21, 2025	Oct 21, 2025	Oct 22, 2025	Oct 21, 2025
Test/Reference	LOR	Unit				
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	55	79	67	78
13C2-6:2 FTSA (surr.)	1	%	50	80	60	61
13C2-8:2 FTSA (surr.)	1	%	56	79	59	80
13C2-10:2 FTSA (surr.)	1	%	51	64	57	63
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	0.91	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	0.96	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	1.0	< 0.1	< 0.1

Client Sample ID			0021_QC262_2_51021	0021_QC265_2_51022	0021_QC266_2_51023
Sample Matrix			Water	Water	Water
Eurofins Sample No.			S25-Oc0084588	S25-Oc0084589	S25-Oc0084590
Date Sampled			Oct 21, 2025	Oct 22, 2025	Oct 23, 2025
Test/Reference	LOR	Unit			
Perfluoroalkyl carboxylic acids (PFCAs)					
Perfluorobutanoic acid (PFBA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA) ^{N11}	0.01	ug/L	0.02	0.02	0.09
Perfluorohexanoic acid (PFHxA) ^{N11}	0.01	ug/L	0.06	0.06	0.40
Perfluoroheptanoic acid (PFHpA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	^{N09} 0.07
Perfluorooctanoic acid (PFOA) ^{N11}	0.01	ug/L	^{N09} 0.01	< 0.01	^{N09} 0.12
Perfluorononanoic acid (PFNA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTTrDA) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	83	82	65
13C5-PFPeA (surr.)	1	%	87	87	70
13C5-PFHxA (surr.)	1	%	102	97	79
13C4-PFHpA (surr.)	1	%	103	90	70
13C8-PFOA (surr.)	1	%	105	94	71
13C5-PFNA (surr.)	1	%	86	84	74
13C6-PFDA (surr.)	1	%	90	81	69
13C2-PFUnDA (surr.)	1	%	77	72	66
13C2-PFDoDA (surr.)	1	%	78	73	69
13C2-PFTeDA (surr.)	1	%	76	71	64

Client Sample ID			0021_QC262_2 51021	0021_QC265_2 51022	0021_QC266_2 51023
Sample Matrix			Water	Water	Water
Eurofins Sample No.			S25- Oc0084588	S25- Oc0084589	S25- Oc0084590
Date Sampled			Oct 21, 2025	Oct 22, 2025	Oct 23, 2025
Test/Reference	LOR	Unit			
Perfluoroalkyl sulfonamido substances					
Perfluorooctane sulfonamide (FOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	81	78	61
D3-N-MeFOSA (surr.)	1	%	77	70	61
D5-N-EtFOSA (surr.)	1	%	78	74	66
D7-N-MeFOSE (surr.)	1	%	67	64	56
D9-N-EtFOSE (surr.)	1	%	69	64	56
D5-N-EtFOSAA (surr.)	1	%	75	68	55
D3-N-MeFOSAA (surr.)	1	%	79	75	61
Perfluoroalkyl sulfonic acids (PFSA)					
Perfluorobutanesulfonic acid (PFBS) ^{N11}	0.01	ug/L	< 0.01	0.09	0.14
Perfluorononanesulfonic acid (PFNS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	0.02
Perfluoropropanesulfonic acid (PFPrS) ^{N15}	0.01	ug/L	< 0.01	0.04	0.03
Perfluoropentanesulfonic acid (PFPeS) ^{N15}	0.01	ug/L	< 0.01	^{N09} 0.08	^{N09} 0.17
Perfluorohexanesulfonic acid (PFHxS) ^{N11}	0.01	ug/L	^{N09} 0.01	^{N09} 0.33	^{N09} 2.9
Perfluoroheptanesulfonic acid (PFHpS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	^{N09} 0.12
Perfluorooctanesulfonic acid (PFOS) ^{N11}	0.01	ug/L	< 0.01	^{N09} 0.30	^{N09} 4.7
Perfluorodecanesulfonic acid (PFDS) ^{N15}	0.01	ug/L	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	92	100	75
18O2-PFHxS (surr.)	1	%	95	101	74
13C8-PFOS (surr.)	1	%	97	87	63
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA) ^{N11}	0.05	ug/L	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA) ^{N11}	0.01	ug/L	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	97	98	68
13C2-6:2 FTSA (surr.)	1	%	78	86	74
13C2-8:2 FTSA (surr.)	1	%	89	80	79
13C2-10:2 FTSA (surr.)	1	%	71	80	62
PFASs Summations					
Sum (PFHxS + PFOS)*	0.01	ug/L	0.01	0.63	7.6
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	0.1	0.8	8.42
Sum of PFASs (n=30)*	0.1	ug/L	0.1	0.9	8.8

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	Oct 31, 2025	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Sydney	Oct 31, 2025	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Sydney	Oct 31, 2025	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Sydney	Oct 31, 2025	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			



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Order No.:
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Phone: 02 9239 7100
Fax: 02 9239 7199

Received: Oct 28, 2025 6:00 PM
Due: Nov 4, 2025
Priority: 5 Day
Contact Name: Steven Castillo

Project Name: JERVIS BAY RANGE FACILITY PFAS ONGOING MONITORING
Project ID: ACT_0021_PFASOMP_25

Eurofins Analytical Services Manager : Adam Bateup

Sample Detail						HOLD*	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X
External Laboratory								
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID			
1	0021_QC202_251021	Oct 21, 2025	7:54AM	Water	S25-Oc0084579			X
2	0021_QC203_251021	Oct 21, 2025	10:55AM	Water	S25-Oc0084580			X
3	0021_QC204_251022	Oct 22, 2025	1:50PM	Water	S25-Oc0084581			X
4	0021_QC223_251021	Oct 21, 2025	10:59AM	Water	S25-Oc0084582			X
5	0021_QC224_251021	Oct 21, 2025	2:48PM	Water	S25-Oc0084583			X
6	0021_QC226_251022	Oct 22, 2025	10:50AM	Soil	S25-Oc0084584		X	X
7	0021_QC240_251021	Oct 21, 2025	11:45AM	Water	S25-Oc0084585			X
8	0021_QC241_251022	Oct 22, 2025	11:38AM	Water	S25-Oc0084586			X
9	0021_QC261_	Oct 21, 2025	9:27AM	Water	S25-Oc0084587			X



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Order No.:
Report #: 1285374
Phone: 02 9239 7100
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Received: Oct 28, 2025 6:00 PM
Due: Nov 4, 2025
Priority: 5 Day
Contact Name: Steven Castillo

Project Name: JERVIS BAY RANGE FACILITY PFAS ONGOING MONITORING
Project ID: ACT_0021_PFASOMP_25

Eurofins Analytical Services Manager : Adam Bateup

Sample Detail						HOLD*	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X
	251021							
10	0021_QC262_251021	Oct 21, 2025	3:03PM	Water	S25-Oc0084588			X
11	0021_QC265_251022	Oct 22, 2025	2:15PM	Water	S25-Oc0084589			X
12	0021_QC266_251023	Oct 23, 2025	11:27AM	Water	S25-Oc0084590			X
13	0021_QC225_251022	Oct 22, 2025	8:38AM	Water	S25-Oc0084591	X		
14	0021_QC227_251022	Oct 22, 2025	3:46PM	Water	S25-Oc0084592	X		
15	0021_QC242_251022	Oct 22, 2025	3:18PM	Water	S25-Oc0084593	X		
Test Counts						3	1	12

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 (<i>bis</i> -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 (PFTTrDA)	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 (PFSA's)							
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 FTSA's)							
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)	%	105			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	121			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	117			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	120			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	110			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	108			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	115			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	110			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	133			50-150	Pass	
Perfluorotridecanoic acid (PFTTrDA)	%	113			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	121			50-150	Pass	

Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
LCS - % Recovery									
Perfluoroalkyl sulfonamido substances									
Perfluorooctane sulfonamide (FOSA)			%	104			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)			%	111			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)			%	100			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)			%	111			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)			%	112			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)			%	119			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)			%	126			50-150	Pass	
LCS - % Recovery									
Perfluoroalkyl sulfonic acids (PFSA's)									
Perfluorobutanesulfonic acid (PFBS)			%	109			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)			%	111			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)			%	94			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)			%	96			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)			%	110			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)			%	114			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)			%	102			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)			%	111			50-150	Pass	
LCS - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSA's)									
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)			%	104			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)			%	134			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)			%	99			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)			%	127			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-Oc0084583	CP	%	104			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	S25-Oc0084583	CP	%	112			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	S25-Oc0084583	CP	%	112			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	S25-Oc0084583	CP	%	120			50-150	Pass	
Perfluorooctanoic acid (PFOA)	S25-Oc0084583	CP	%	135			50-150	Pass	
Perfluorononanoic acid (PFNA)	S25-Oc0084583	CP	%	127			50-150	Pass	
Perfluorodecanoic acid (PFDA)	S25-Oc0084583	CP	%	128			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	S25-Oc0084583	CP	%	121			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	S25-Oc0084583	CP	%	113			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	S25-Oc0084583	CP	%	114			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	S25-Oc0084583	CP	%	116			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonamido substances									
				Result 1					
Perfluorooctane sulfonamide (FOSA)	S25-Oc0084583	CP	%	110			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	S25-Oc0084583	CP	%	116			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	S25-Oc0084583	CP	%	108			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	S25-Oc0084583	CP	%	114			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	S25-Oc0084583	CP	%	116			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-Oc0084583	CP	%	99			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	S25-Oc0084583	CP	%	101			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonic acids (PFASs)				Result 1					
Perfluorobutanesulfonic acid (PFBS)	S25-Oc0084583	CP	%	111			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	S25-Oc0084583	CP	%	111			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	S25-Oc0084583	CP	%	102			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	S25-Oc0084583	CP	%	97			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	S25-Oc0084583	CP	%	103			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	S25-Oc0084583	CP	%	107			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	S25-Oc0084583	CP	%	105			50-150	Pass	
Spike - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	S25-Oc0084583	CP	%	112			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	S25-Oc0084583	CP	%	132			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	S25-Oc0084583	CP	%	99			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	S25-Oc0084583	CP	%	107			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-Oc0091641	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	S25-Oc0091641	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	S25-Oc0091641	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	S25-Oc0091641	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	S25-Oc0091641	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	S25-Oc0091641	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	S25-Oc0091641	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	S25-Oc0091641	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	S25-Oc0091641	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	S25-Oc0091641	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	S25-Oc0091641	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	

Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	S25-Oc0091641	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	S25-Oc0091641	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	S25-Oc0091641	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	S25-Oc0091641	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	S25-Oc0091641	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	S25-Oc0091641	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	S25-Oc0091641	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	S25-Oc0091641	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	S25-Oc0091641	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	S25-Oc0091641	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	S25-Oc0091641	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	S25-Oc0091641	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	S25-Oc0091641	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	S25-Oc0091641	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	S25-Oc0091641	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	S25-Oc0091641	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	S25-Oc0091641	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	S25-Oc0091641	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	S25-Oc0091641	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD		
Perfluorobutanoic acid (PFBA)	S25-Oc0083738	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Perfluorotridecanoic acid (PFTrDA)	S25-Oc0083738	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorotetradecanoic acid (PFTeDA)	S25-Oc0083738	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass

Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	S25-Oc0083738	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	S25-Oc0083738	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	S25-Oc0083738	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	S25-Oc0083738	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	S25-Oc0083738	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	S25-Oc0083738	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	S25-Oc0083738	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	S25-Oc0083738	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	S25-Oc0083738	NCP	ug/L	0.04	0.04	17	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	S25-Oc0083738	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	S25-Oc0083738	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	S25-Oc0083738	NCP	ug/L	0.17	0.15	13	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	S25-Oc0083738	NCP	ug/L	0.02	0.02	12	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	S25-Oc0083738	NCP	ug/L	1.0	0.85	17	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	S25-Oc0083738	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	S25-Oc0083738	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	S25-Oc0083738	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	S25-Oc0083738	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	S25-Oc0083738	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD		
Perfluorobutanoic acid (PFBA)	S25-Oc0076880	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Perfluorotridecanoic acid (PFTrDA)	S25-Oc0076880	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorotetradecanoic acid (PFTeDA)	S25-Oc0076880	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass

Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	S25-Oc0076880	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	S25-Oc0076880	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	S25-Oc0076880	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	S25-Oc0076880	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	S25-Oc0076880	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	S25-Oc0076880	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	S25-Oc0076880	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSA's)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	S25-Oc0076880	NCP	ug/L	0.08	0.07	13	30%	Pass
Perfluorononanesulfonic acid (PFNS)	S25-Oc0076880	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	S25-Oc0076880	NCP	ug/L	0.04	0.04	11	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	S25-Oc0076880	NCP	ug/L	0.04	0.04	12	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	S25-Oc0076880	NCP	ug/L	0.17	0.17	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	S25-Oc0076880	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	S25-Oc0076880	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	S25-Oc0076880	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA's)				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	S25-Oc0076880	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	S25-Oc0076880	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	S25-Oc0076880	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	S25-Oc0076880	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD		
Perfluorobutanoic acid (PFBA)	S25-Oc0084582	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Perfluoropentanoic acid (PFPeA)	S25-Oc0084582	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanoic acid (PFHxA)	S25-Oc0084582	CP	ug/L	0.01	0.01	5.0	30%	Pass
Perfluoroheptanoic acid (PFHpA)	S25-Oc0084582	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanoic acid (PFOA)	S25-Oc0084582	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanoic acid (PFNA)	S25-Oc0084582	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanoic acid (PFDA)	S25-Oc0084582	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroundecanoic acid (PFUnDA)	S25-Oc0084582	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorododecanoic acid (PFDoDA)	S25-Oc0084582	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorotridecanoic acid (PFTrDA)	S25-Oc0084582	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorotetradecanoic acid (PFTeDA)	S25-Oc0084582	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass

Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	S25-Oc0084582	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	S25-Oc0084582	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	S25-Oc0084582	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	S25-Oc0084582	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	S25-Oc0084582	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	S25-Oc0084582	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	S25-Oc0084582	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	S25-Oc0084582	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	S25-Oc0084582	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	S25-Oc0084582	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	S25-Oc0084582	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	S25-Oc0084582	CP	ug/L	0.04	0.04	3.0	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	S25-Oc0084582	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	S25-Oc0084582	CP	ug/L	0.07	0.06	14	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	S25-Oc0084582	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	S25-Oc0084582	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	S25-Oc0084582	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	S25-Oc0084582	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	S25-Oc0084582	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD		
Perfluorobutanoic acid (PFBA)	S25-Oc0057125	NCP	ug/L	2.6	2.8	6.0	30%	Pass
Perfluorotridecanoic acid (PFTrDA)	S25-Oc0057125	NCP	ug/L	< 0.5	< 0.5	<1	30%	Pass
Perfluorotetradecanoic acid (PFTeDA)	S25-Oc0057125	NCP	ug/L	< 0.5	< 0.5	<1	30%	Pass

Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	S25-Oc0057125	NCP	ug/L	< 2.5	< 2.5	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	S25-Oc0057125	NCP	ug/L	< 2.5	< 2.5	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	S25-Oc0057125	NCP	ug/L	< 2.5	< 2.5	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	S25-Oc0057125	NCP	ug/L	< 2.5	< 2.5	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	S25-Oc0057125	NCP	ug/L	< 2.5	< 2.5	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	S25-Oc0057125	NCP	ug/L	< 2.5	< 2.5	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	S25-Oc0057125	NCP	ug/L	< 2.5	< 2.5	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	S25-Oc0057125	NCP	ug/L	< 0.5	< 0.5	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	S25-Oc0057125	NCP	ug/L	< 0.5	< 0.5	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	S25-Oc0057125	NCP	ug/L	< 0.5	< 0.5	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	S25-Oc0057125	NCP	ug/L	< 0.5	< 0.5	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	S25-Oc0057125	NCP	ug/L	< 0.5	< 0.5	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	S25-Oc0057125	NCP	ug/L	< 0.5	< 0.5	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	S25-Oc0057125	NCP	ug/L	< 0.5	< 0.5	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	S25-Oc0057125	NCP	ug/L	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	S25-Oc0057125	NCP	ug/L	< 0.5	< 0.5	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	S25-Oc0057125	NCP	ug/L	< 2.5	< 2.5	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	S25-Oc0057125	NCP	ug/L	< 0.5	< 0.5	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	S25-Oc0057125	NCP	ug/L	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD		
Perfluorobutanoic acid (PFBA)	S25-Oc0083903	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Perfluorotridecanoic acid (PFTrDA)	S25-Oc0083903	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorotetradecanoic acid (PFTeDA)	S25-Oc0083903	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass

Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	S25-Oc0083903	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	S25-Oc0083903	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	S25-Oc0083903	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	S25-Oc0083903	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	S25-Oc0083903	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	S25-Oc0083903	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	S25-Oc0083903	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSA's)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	S25-Oc0083903	NCP	ug/L	0.09	0.08	6.0	30%	Pass
Perfluorononanesulfonic acid (PFNS)	S25-Oc0083903	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	S25-Oc0083903	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	S25-Oc0083903	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	S25-Oc0083903	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	S25-Oc0083903	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	S25-Oc0083903	NCP	ug/L	0.01	0.01	22	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	S25-Oc0083903	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA's)				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	S25-Oc0083903	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	S25-Oc0083903	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	S25-Oc0083903	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	S25-Oc0083903	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD		
Perfluorobutanoic acid (PFBA)	S25-Oc0084717	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Perfluorotridecanoic acid (PFTrDA)	S25-Oc0084717	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorotetradecanoic acid (PFTeDA)	S25-Oc0084717	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass

Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	S25-Oc0084717	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	S25-Oc0084717	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	S25-Oc0084717	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	S25-Oc0084717	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	S25-Oc0084717	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	S25-Oc0084717	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	S25-Oc0084717	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	S25-Oc0084717	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	S25-Oc0084717	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	S25-Oc0084717	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	S25-Oc0084717	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	S25-Oc0084717	NCP	ug/L	0.02	0.02	6.0	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	S25-Oc0084717	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	S25-Oc0084717	NCP	ug/L	0.05	0.04	15	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	S25-Oc0084717	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	S25-Oc0084717	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	S25-Oc0084717	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	S25-Oc0084717	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	S25-Oc0084717	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD		
Perfluorobutanoic acid (PFBA)	S25-Oc0079721	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Perfluorotridecanoic acid (PFTrDA)	S25-Oc0079721	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorotetradecanoic acid (PFTeDA)	S25-Oc0079721	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass

Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	S25-Oc0079721	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	S25-Oc0079721	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	S25-Oc0079721	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	S25-Oc0079721	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	S25-Oc0079721	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	S25-Oc0079721	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	S25-Oc0079721	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	S25-Oc0079721	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	S25-Oc0079721	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	S25-Oc0079721	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	S25-Oc0079721	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	S25-Oc0079721	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	S25-Oc0079721	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	S25-Oc0079721	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	S25-Oc0079721	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	S25-Oc0079721	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	S25-Oc0079721	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	S25-Oc0079721	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	S25-Oc0079721	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD		
Perfluorobutanoic acid (PFBA)	S25-Oc0077153	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Perfluorotridecanoic acid (PFTrDA)	S25-Oc0077153	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorotetradecanoic acid (PFTeDA)	S25-Oc0077153	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass

Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	S25-Oc0077153	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	S25-Oc0077153	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	S25-Oc0077153	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	S25-Oc0077153	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	S25-Oc0077153	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	S25-Oc0077153	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	S25-Oc0077153	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSA's)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	S25-Oc0077153	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	S25-Oc0077153	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	S25-Oc0077153	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	S25-Oc0077153	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	S25-Oc0077153	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	S25-Oc0077153	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	S25-Oc0077153	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	S25-Oc0077153	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA's)				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	S25-Oc0077153	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	S25-Oc0077153	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	S25-Oc0077153	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	S25-Oc0077153	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD		
Perfluorobutanoic acid (PFBA)	S25-Oc0094962	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Perfluorotridecanoic acid (PFTrDA)	S25-Oc0094962	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorotetradecanoic acid (PFTeDA)	S25-Oc0094962	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass

Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	S25-Oc0094962	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	S25-Oc0094962	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	S25-Oc0094962	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	S25-Oc0094962	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	S25-Oc0094962	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	S25-Oc0094962	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	S25-Oc0094962	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	S25-Oc0094962	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	S25-Oc0094962	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	S25-Oc0094962	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	S25-Oc0094962	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	S25-Oc0094962	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	S25-Oc0094962	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	S25-Oc0094962	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	S25-Oc0094962	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	S25-Oc0094962	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	S25-Oc0094962	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	S25-Oc0094962	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	S25-Oc0094962	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD		
Perfluorobutanoic acid (PFBA)	S25-Oc0083731	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Perfluorotridecanoic acid (PFTrDA)	S25-Oc0083731	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorotetradecanoic acid (PFTeDA)	S25-Oc0083731	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass

Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	S25-Oc0083731	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	S25-Oc0083731	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	S25-Oc0083731	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	S25-Oc0083731	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	S25-Oc0083731	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	S25-Oc0083731	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	S25-Oc0083731	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	S25-Oc0083731	NCP	ug/L	0.02	0.02	1.0	30%	Pass
Perfluorononanesulfonic acid (PFNS)	S25-Oc0083731	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	S25-Oc0083731	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	S25-Oc0083731	NCP	ug/L	0.02	0.02	5.0	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	S25-Oc0083731	NCP	ug/L	0.22	0.23	4.0	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	S25-Oc0083731	NCP	ug/L	0.01	0.01	4.0	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	S25-Oc0083731	NCP	ug/L	0.37	0.39	5.0	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	S25-Oc0083731	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSA)				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	S25-Oc0083731	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	S25-Oc0083731	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	S25-Oc0083731	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	S25-Oc0083731	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	No
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](#).

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Quality Assurance/Quality Control Review

Summary :

Quality Control Frequency - Solid

- 0 Duplicate frequency non-compliant
- 0 Laboratory matrix spike frequency non-compliant
- 0 Method Blank frequency non-compliant
- 0 Laboratory Control Spikes frequency non-compliant

Quality Control Frequency - Water

- 0 Duplicate frequency non-compliant
- 0 Laboratory matrix spike frequency non-compliant
- 0 Method Blank frequency non-compliant
- 0 Laboratory Control Spikes frequency non-compliant

Quality Control Outlier - Solid

- 0 Duplicate outlier
- 0 Laboratory matrix spike outlier
- 0 Method Blank outlier
- 0 Laboratory Control Spikes outlier

Quality Control Outlier - Water

- 0 Duplicate outlier
- 0 Laboratory matrix spike outlier
- 0 Method Blank outlier
- 0 Laboratory Control Spikes outlier

Holding Time Outlier - Solid

- No samples analysed out of holding time.

Holding Time Outlier - Water

- No samples analysed out of holding time.

Quality Control Analyte Summary Compliance

The table below is the actual occurrence of QC performed on the batch of samples within this report and as defined below

Quality Control Parameter Frequency Compliance follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure (NEPM) April 2011, Schedule B3, Guideline on Laboratory Analysis of Potentially Contaminated Soils and US EPA SW-846 Chapter 1: 'Quality Control'. It comprises the following when a laboratory process batch is deemed to consist of up to 20 samples that are similar in terms of matrix and test procedure, and are processed as one unit for QC purposes. If more than 20 samples are being processed, they are considered as more than one batch. Method blank - One method blank per process batch. Laboratory duplicate: There should be at least one duplicate per process batch or two duplicates if the process batch exceeds 10 samples. Laboratory control sample (LCS): There should be at least one LCS per process batch. Matrix spikes - There should be one matrix spike per matrix type per process batch.

For Per- and Polyfluoroalkyl Substances (PFAS) analysis, as outlined in US EPA Quality Systems Manual (QSM 6.0 or later versions) Table B-24. Per- and Polyfluoroalkyl Substances (PFAS) Analysis by Liquid Chromatography/Mass Spectrometry/Mass Spectrometry (LC/MS/MS), follow strict Data Validation procedures to ensure accuracy, precision, and reliability as per US DoD's Environmental Data Quality Workgroup Data Validation Guidelines Module 6. Acceptance criteria and frequency for Initial Calibration Verification (ICV), Continuing Calibration Verification (CCV), Laboratory Control Sample (LCS), Method Blank (MB), Surrogate Recovery (for Isotopically Labelled Standards for Extracted Internal Standards and Non-extracted Internal Standards (if applicable for Method 1633)) and duplicates follow the NEPM requirements or additional prerequisites listed in PFAS National Environmental Management Plan 3.0, 2025.

Matrix : Solid

Analysis	QC Type	Samples Analysed	QC Sample Reported	Frequency Criteria		Within Acceptance Limits
				Expected	Achieved	
Perfluoroalkyl carboxylic acids (PFCAs)	Laboratory Duplicates	1	1	1	✓	✓
	Laboratory Matrix Spikes	1	1	1	✓	✓
	Method Blanks	1	1	1	✓	✓
	Laboratory Control Samples	1	1	1	✓	✓
Perfluoroalkyl sulfonamido substances	Laboratory Duplicates	1	1	1	✓	✓
	Laboratory Matrix Spikes	1	1	1	✓	✓
	Method Blanks	1	1	1	✓	✓
	Laboratory Control Samples	1	1	1	✓	✓
Perfluoroalkyl sulfonic acids (PFSA's)	Laboratory Duplicates	1	1	1	✓	✓ ^{Q15}
	Laboratory Matrix Spikes	1	1	1	✓	✓
	Method Blanks	1	1	1	✓	✓
	Laboratory Control Samples	1	1	1	✓	✓
n:2 Fluorotelomer sulfonic acids (n:2 FTSA's)	Laboratory Duplicates	1	1	1	✓	✓
	Laboratory Matrix Spikes	1	1	1	✓	✓
	Method Blanks	1	1	1	✓	✓
	Laboratory Control Samples	1	1	1	✓	✓

Qualifier Codes/Comments

Q15 The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Matrix : Water

Analysis	QC Type	Samples Analysed	QC Sample Reported	Frequency Criteria		Within Acceptance Limits
				Expected	Achieved	
Perfluoroalkyl carboxylic acids (PFCAs)	Laboratory Duplicates	11	11	2	✓	✓
	Laboratory Matrix Spikes	11	1	1	✓	✓
	Method Blanks	11	1	1	✓	✓
	Laboratory Control Samples	11	1	1	✓	✓
Perfluoroalkyl sulfonamido substances	Laboratory Duplicates	11	11	2	✓	✓
	Laboratory Matrix Spikes	11	1	1	✓	✓
	Method Blanks	11	1	1	✓	✓
	Laboratory Control Samples	11	1	1	✓	✓

Matrix : Water

Perfluoroalkyl sulfonic acids (PFSA's)	Laboratory Duplicates	11	11	2	✓	✓
	Laboratory Matrix Spikes	11	1	1	✓	✓
	Method Blanks	11	1	1	✓	✓
	Laboratory Control Samples	11	1	1	✓	✓
n:2 Fluorotelomer sulfonic acids (n:2 FTSA's)	Laboratory Duplicates	11	11	2	✓	✓
	Laboratory Matrix Spikes	11	1	1	✓	✓
	Method Blanks	11	1	1	✓	✓
	Laboratory Control Samples	11	1	1	✓	✓

Analysis Holding Time Compliance
Matrix : Solid

	Analysis Holding	Date Sampled	Date Extracted	Date Analysed	Compliant
% Moisture					
25-Oc0084584	14 Days	22/10/2025	28/10/2025	30/10/2025	✓
Perfluoroalkyl carboxylic acids (PFCAs)					
25-Oc0084584	90 Days	22/10/2025	28/10/2025	30/10/2025	✓
Perfluoroalkyl sulfonamido substances					
25-Oc0084584	90 Days	22/10/2025	28/10/2025	30/10/2025	✓
Perfluoroalkyl sulfonic acids (PFSA's)					
25-Oc0084584	90 Days	22/10/2025	28/10/2025	30/10/2025	✓
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)					
25-Oc0084584	90 Days	22/10/2025	28/10/2025	30/10/2025	✓

Matrix : Water

	Analysis Holding	Date Sampled	Date Extracted	Date Analysed	Compliant
Perfluoroalkyl carboxylic acids (PFCAs)					
25-Oc0084579	28 Days	21/10/2025	28/10/2025	31/10/2025	✓
25-Oc0084580		21/10/2025	28/10/2025	31/10/2025	✓
25-Oc0084581		22/10/2025	28/10/2025	31/10/2025	✓
25-Oc0084582		21/10/2025	28/10/2025	31/10/2025	✓
25-Oc0084583		21/10/2025	28/10/2025	31/10/2025	✓
25-Oc0084585		21/10/2025	28/10/2025	31/10/2025	✓
25-Oc0084586		22/10/2025	28/10/2025	31/10/2025	✓
25-Oc0084587		21/10/2025	28/10/2025	31/10/2025	✓
25-Oc0084588		21/10/2025	28/10/2025	31/10/2025	✓
25-Oc0084589		22/10/2025	28/10/2025	31/10/2025	✓
25-Oc0084590		23/10/2025	28/10/2025	31/10/2025	✓
Perfluoroalkyl sulfonamido substances					
25-Oc0084579	28 Days	21/10/2025	28/10/2025	31/10/2025	✓
25-Oc0084580		21/10/2025	28/10/2025	31/10/2025	✓
25-Oc0084581		22/10/2025	28/10/2025	31/10/2025	✓
25-Oc0084582		21/10/2025	28/10/2025	31/10/2025	✓
25-Oc0084583		21/10/2025	28/10/2025	31/10/2025	✓
25-Oc0084585		21/10/2025	28/10/2025	31/10/2025	✓
25-Oc0084586		22/10/2025	28/10/2025	31/10/2025	✓
25-Oc0084587		21/10/2025	28/10/2025	31/10/2025	✓
25-Oc0084588		21/10/2025	28/10/2025	31/10/2025	✓
25-Oc0084589		22/10/2025	28/10/2025	31/10/2025	✓
25-Oc0084590		23/10/2025	28/10/2025	31/10/2025	✓
Perfluoroalkyl sulfonic acids (PFSAs)					
25-Oc0084579	28 Days	21/10/2025	28/10/2025	31/10/2025	✓
25-Oc0084580		21/10/2025	28/10/2025	31/10/2025	✓
25-Oc0084581		22/10/2025	28/10/2025	31/10/2025	✓
25-Oc0084582		21/10/2025	28/10/2025	31/10/2025	✓
25-Oc0084583		21/10/2025	28/10/2025	31/10/2025	✓
25-Oc0084585		21/10/2025	28/10/2025	31/10/2025	✓
25-Oc0084586		22/10/2025	28/10/2025	31/10/2025	✓
25-Oc0084587		21/10/2025	28/10/2025	31/10/2025	✓
25-Oc0084588		21/10/2025	28/10/2025	31/10/2025	✓
25-Oc0084589		22/10/2025	28/10/2025	31/10/2025	✓
25-Oc0084590		23/10/2025	28/10/2025	31/10/2025	✓

	Analysis Holding	Date Sampled	Date Extracted	Date Analysed	Compliant
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)					
25-Oc0084579	28 Days	21/10/2025	28/10/2025	31/10/2025	✓
25-Oc0084580		21/10/2025	28/10/2025	31/10/2025	✓
25-Oc0084581		22/10/2025	28/10/2025	31/10/2025	✓
25-Oc0084582		21/10/2025	28/10/2025	31/10/2025	✓
25-Oc0084583		21/10/2025	28/10/2025	31/10/2025	✓
25-Oc0084585		21/10/2025	28/10/2025	31/10/2025	✓
25-Oc0084586		22/10/2025	28/10/2025	31/10/2025	✓
25-Oc0084587		21/10/2025	28/10/2025	31/10/2025	✓
25-Oc0084588		21/10/2025	28/10/2025	31/10/2025	✓
25-Oc0084589		22/10/2025	28/10/2025	31/10/2025	✓
25-Oc0084590		23/10/2025	28/10/2025	31/10/2025	✓



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