Appendix I

OMP Sampling Event Reports

Sampling Event Report – April 2025

HMAS Creswell and Jervis Bay Range Facility

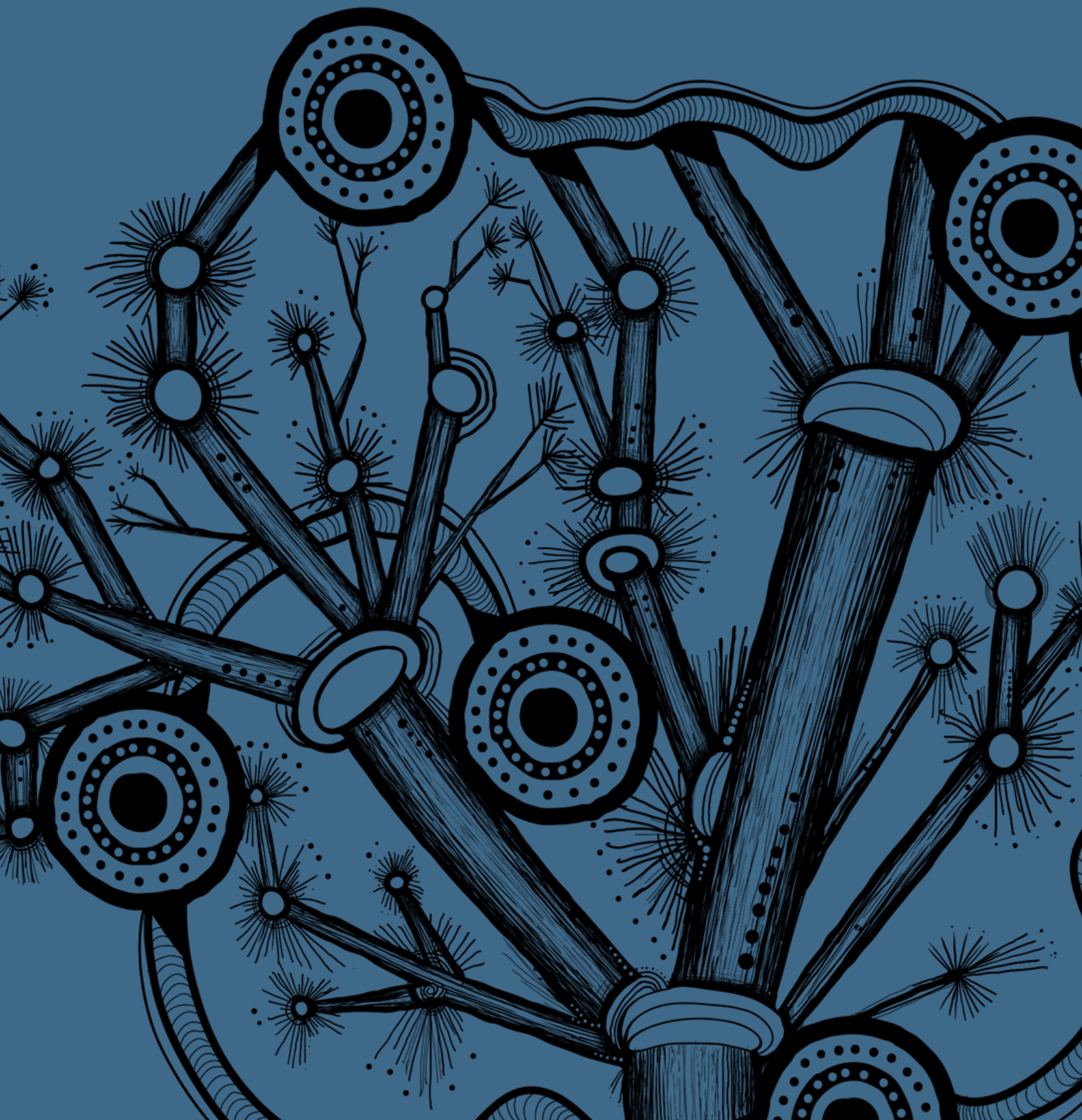
Department of Defence

11 June 2025

→ The Power of Commitment

Acknowledgement of Country

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



List of acronyms

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GHD Pty Ltd | ABN 39 008 488 373
Contact: GHD
133 Castlereagh Street, Level 15
Sydney, New South Wales 2000, Australia
T +61 2 9239 7100 | **F** +61 2 9239 7199 | **E** sydmail@ghd.com | **ghd.com**

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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
FSANZ	Food Standards Australia New Zealand
HEPA	Heads of Environment Protection Authority
HHERA	Human Health and Ecological Risk Assessment
JBT	Jervis Bay Territory
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
OMIR	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

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
mg/L	Milligrams per Litre
mV	MilliVolts

Contents

List of acronyms **ii**

List of units **iv**

1. Introduction **1**

1.1 Purpose of this report 1

1.2 Limitations 1

2. Scope of work **2**

2.1 SAQP deviations 6

3. Methodology **9**

3.1 Sampling methodology 9

3.2 Adopted screening criteria 10

3.3 Quality assurance and quality control 12

4. Field observations and results **13**

4.1 General observations 13

4.2 Field observations and measurements 13

4.3 Summary of analytical results 16

4.3.1 Current event 16

4.3.2 Previous data 18

5. Summary and recommendations **21**

5.1 Summary of monitoring event 21

5.2 Upcoming sampling events 22

5.3 Upcoming ongoing monitoring report 22

Table index

Table 1 Groundwater sampling locations 3

Table 2 Surface water sampling locations 4

Table 3 Sediment sampling locations 5

Table 4 Tank water sampling locations 5

Table 5 Deviations from SAQP 6

Table 6 Sampling methodology 9

Table 7 Summary of adopted screening criteria – surface water, groundwater, and sediment 11

Table 8 General observations 13

Table 9 Summary of field observations and measurements 14

Table 10 Deviations from historical dataset – surface water and tank samples 18

Table 11 Deviations from historical dataset – groundwater samples 19

Table 12 Deviations from the historical dataset – sediment 20

Table 13 Summary of sampling event 21

Table C1 Summary of quality assurance / quality control criteria as (applicable) – all media 2

Table C2 Duplicate pairs RPD exceedances 4

Table C3 Permitted laboratory blind duplicate relative percentage differences (RPD) ranges 5

Appendices

Appendix A Figures
Appendix B Results tables
Appendix C Data validation
Appendix D Equipment calibration
Appendix E Laboratory certificates and chain of custody documents
Appendix F Field notes

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, 2020) 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 in 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 April 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 works was to implement the scope of work for the April 2025 sampling event in accordance with the sampling and analysis quality plan (SAQP) (GHD, 2025).

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, 2020).

1.2 Limitations

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

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

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

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

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

GHD has prepared this report 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 works was completed in accordance with the SAQP (GHD, 2025), as follows:

- Organise fieldwork and obtain approval for site access to monitoring locations.
- 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 below 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 super trace limit of reporting (LOR) for locations where a potential drinking water exposure and standard LOR for all other locations.
- Data management of the OMP field and laboratory data in Defence ESdat database.
- Preparation of this sampling event report.

Table 1 Groundwater sampling locations

Catchment	SPR	Area	Site	Locations	Number of Locations	Total
Bherwerre Barrier	Receptor	Off-Site	0021	MW114, MW115	2	2
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	MW012, MW055, MW056, MW057, MW058, MW059, MW070[1], MW071[1]	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, MW115	3	21
			0021	MW025, MW026, MW117, MW118	4	
	Pathway	On-Site	0020	MW001, MW007, MW017, MW068, MW069[1], MW109, MW110, MW111	8	
			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	MW024, MW061, MW063, MW064, MW065, MW101, MW103, MW104, MW105, MW106, MW107, MW110, MW111, MW150, MW151, MW152, MW153, MW154, MW155	19	26
	Pathway	On-Site	0021	MW021, MW060, MW070, MW071, MW072, MW112, MW113	7	
Summercloud Creek	Pathway	On-Site	0021	MW022	1	3
		Off-Site	0021	MW131, MW132	2	
Total						**88**

Table 2 Surface water sampling locations

Catchment	SPR	Area	Site	Locations	Number of Locations	Total
Bherwerre Barrier	Receptor	Off-Site	0021	SW083, SW212	2	2
Captains Lagoon	Source	On-Site	0021	SW001, SW027, SW111	3	13
	Pathway	On-Site	0020	SW057, SW013, SW019, SW021, SW126	5	
		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	15
		On-Site	0020	SW018	1	
	Pathway	On-Site	0020	SW022, SW023, SW054	3	
			0021	SW020, SW022, SW024, SW025	4	
		Off-Site	0020	SW030, SW032	2	
	Receptor	Off-Site	0020	SW026, SW027, SW029, SW033	4	
Lakes	Pathway	Off-Site	0021	SW035	1	7
	Receptor	Off-Site	0021	SW032, SW034, SW036, SW037, SW038, SW040	6	
Mary Creek	Source	On-Site	0021	SW002, SW003, SW004, SW005, SW006, SW011, SW016, SW017, SW110, SW112, SW127, SW130, SW153	13	24
	Pathway	On-Site	0021	SW010, SW018, SW048	3	
		Off-Site	0021	SW044, SW045, SW053	3	
	Receptor	On-Site	0021	SW012	1	
		Off-Site	0021	SW043, SW051, SW052, SW211	4	
HMAS Creswell STP	Tank	On-Site	0020	SW035, SW036, SW037	3	3
Summercloud Creek	Pathway	Off-Site	0021	SW057, SW058, SW059	3	6
	Receptor	Off-Site	0021	SW056, SW085, SW188	3	
Telegraph Creek	Pathway	Off-Site	0021	SW062, SW064	2	5
	Receptor	Off-Site	0021	SW060, SW068, SW069	3	
Total						**80**

Table 3 Sediment sampling locations

Catchment	SPR	Area	Site	Location	Number of Locations	Total
Bherwerre Barrier	Receptor	Off-Site	0021	SD073	1	1
Captains Lagoon	Source	On-Site	0021	SD001, SD023	2	11
	Pathway	On-Site	0021	SD009, SD011, SD015, SD017	4	
		Off-Site	0020	SD025	1	
	Receptor	On-Site	0020	SD018, SD019	2	
		Off-Site	0020	SD024, SD026	2	
Clay Pools	Receptor	Off-Site	0021	SD066, SD067, SD068, SD069, SD070	5	5
Flatrock Creek	Source	On-Site	0020	SD028	1	12
	Pathway	On-Site	0020	SD032, SD033	2	
			0021	SD016, SD018, SD020, SD021	4	
		Off-Site	0020	SD006	1	
	Receptor	Off-Site	0020	SD001, SD002, SD004, SD007	4	
Lakes	Pathway	Off-Site	0021	SD029	1	7
	Receptor	Off-Site	0021	SD028, SD030, SD031, SD032, SD080, SD093	6	
Mary Creek	Source	On-Site	0021	SD002, SD003, SD004, SD005, SD007, SD012, SD013, SD110	8	17
	Pathway	On-Site	0021	SD006, SD014, SD040	3	
		Off-Site	0021	SD036, SD037, SD111	3	
	Receptor	Off-Site	0021	SD035, SD043, SD044	3	
Summercloud Creek	Pathway	Off-Site	0021	SD047, SD048, SD049	3	6
	Receptor	Off-Site	0021	SD046, SD075, SD188	3	
Telegraph Creek	Pathway	Off-Site	0021	SD052, SD054	2	5
	Receptor	Off-Site	0021	SD050, SD058, SD059	3	
Total						**64**

Table 4 Tank water sampling locations

Area	SPR	Area	Site	Locations	Number of Locations	Total
JBRF RAN SSSS	Tank	On-site	0021	OTH001, OTH002, OTH003, OTH004, OTH005, OTH006	6	6
Total						**6**

2.1 SAQP deviations

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

- The SAQP (GHD, 2025).
- 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.

Table 5 Deviations from SAQP

SAQP Deviation	Comment/Justification	Impact on dataset
Samples, as well as associated gauging and water quality parameters were not collected from three of the 88 scheduled groundwater sampling locations	Groundwater locations 0020_MW055 and 0020_MW056 were dry at the time of sampling, therefore could not be sampled during this event.	The lack of sampling data for 0020_MW055 and 0020_MW056 will impact the future mass flux assessment.
	Groundwater locations 0020_MW008, 0020_MW108, and 0020_MW105 were not able to be located during the October 2024 event and are understood to have been destroyed or backfilled. Replacement wells were drilled (0020_MW069, 0020_MW070, and 0020_MW071 respectively) and groundwater samples collected.	No impact as locations 0020_MW069, 0020_MW070, and 0020_MW071 sampled in place of 0020_MW008, 0020_MW108, and 0020_MW105, respectively.
	Groundwater location 0021_MW115 was not able to be accessed during this sampling event, as all roads to this location were flooded, preventing access to the well.	The lack of sampling data for 0021_MW115 is not considered to be a significant impact as historical concentrations of PFAS at this location has been less than the adopted criteria. An additional surface water sample from pooled water in the vicinity of the groundwater well was taken and analysed (0021_SW212).
Samples as well as associated water quality parameters were not collected from 8 of the 80 scheduled surface water sampling locations	Surface water location 0020_SW054 was dry, and therefore could not be sampled during this event.	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. Corresponding sediment samples for 0020_SW002 (0021_SD002), 0021_SW016 (0021_SD012), and 0021_SW017 (0021_SD013) were collected as part of this event
	Surface water locations 0021_SW002 and 0021_SW011 (Mary Creek catchment, source locations), and 0021_SW111 (Captains Lagoons catchment, source location) were dry, and therefore could not be sampled during this event.	
	Surface water locations 0021_SW016 and 0020_SW017 were dry and therefore could not be sampled during this event. These locations are within Mary Creek catchment and are source locations.	
	Surface water location 0021_SW038 was unable to be accessed due to thick vegetation and difficult terrain rendering the location inaccessible on foot. This location is on the bank of Lake Windermere to the north-east.	The lack of sampling data for this surface water location is a data gap. However, this location is scheduled to be removed from the OMP as part of the 2025 OMP update.
	Surface water location 0021_SW077 was dry, therefore could not be sampled during this event.	The lack of sampling data for 0021_SW077 is not considered to be significant as all other nearby surface water samples from Clay Pools were able to be sampled, including nearby monitoring well 0021_MW020, which is understood to be hydraulically connected to the Clay Pools.

SAQP Deviation	Comment/Justification	Impact on dataset
Samples were not collected from four of the 64 scheduled sediment sampling locations	Sediment sampling locations 0021_SD007, 0021_SD047, 0021_SD048, and 0021_SD052 were not able to be sampled as there was no sediment present during this event.	The lack of sampling data is not considered to be significant as it confirms that the source> pathway> receptor linkages for PFAS in sediment at this location is incomplete. Corresponding surface water samples for 0021_SD047 (0021_SW057), 0021_SD048 (0021_SW058) and 0021_SD052 (0021_SW062) were collected as part of this event.
	Sediment sampling location 0021_SD032 was unable to be accessed due to thick vegetation and difficult terrain rendering the location inaccessible due to safety considerations. This location is on the bank of Lake Windermere to the north-east.	The lack of sampling data for this surface water location is a data gap. However, this location is scheduled to be removed from the OMP as part of the 2025 OMP update.
An additional sediment sample was collected	Additional sample 0021_SD188_A was collected approximately 10m from 0021_SD188. This was collected based after information from Wreck Bay Aboriginal Community Council Rangers indicated that the clay material from this particular location was used for ceremonial purposes.	This provides further information to enhance the understanding of PFAS in sediments in a receptor location.
Samples as well as associated water quality parameters were not able to be collected from one of the six tank sampling locations	Tank sampling location 0021_OTH004 was not able to be sampled as the access tap was removed.	This presents a data gap. However, 0021_OTH004 (Tank S439) is scheduled for decommissioning in 2025, and no new tank will be installed. The existing data set is considered adequate for the purposes of decision making.
Groundwater sampling methodology	The SAQP (GHD, 2025) methodology for groundwater sampling notes HydraSleeve™ as the primary sampling methodology. After discussions with Defence, it was decided that groundwater samples were to be collected using low-flow sampling techniques.	GHD note that remedial performance monitoring activities (outlined in the GHD validation and performance monitoring SAQP (GHD December 2024)) were modified to low flow sampling given the difficulties using HydraSleeve™ during the October 2024 OMP event. During that event the shallow water column triggered the alternative approach to utilise bailers for sample collection; however, it was discussed that low flow sampling was a more robust technique to ensure sample collection and for consistent data quality for the whole base across both sampling programs. Low-flow sampling is proposed to align OMP sampling methodology for consistency purposes between the historical LC, performance monitoring and the OMP.
	Bailers were used at the following locations: – 0020_MW069, 0020_MW070, and 0020_MW071 due to low-flow pump failure. – 0021_MW026 as access was required by significant walking and carrying equipment was impractical. – 0020_MW012, 0021_MW111, 0021_MW134, and 0021_MW152, as these locations were re-sampled later in the sampling event using bailers, as the original samples were misplaced.	While this is a deviation from the agreed methodology, samples were still collected. These samples will be collected in the October OMP event using low-flow sampling methodology. GHD aim to solve the access constraint for 0021_MW026 before the next sampling event. Use of bailers at the four locations that were re-sampled is not expected to have an impact on the dataset, these wells were purged using low-flow sampling methods and the groundwater in the wells was still considered 'fresh' when re-sampled with a bailer.

SAQP Deviation	Comment/Justification	Impact on dataset
Samples were collected from the tank using a different methodology to the SAQP	Tank sampling methods were adjusted for the following locations, instead of using a bailer, sample: – 0021_OTH001 was collected via grab sample from a dedicated sampling tap on the outside of the tank – 0021_OTH002 was collected using a water sampling pole	This has no impact on the dataset as samples were collected as grab samples using the same sample handling and decontamination procedures as if a bailer was used.

3. Methodology

3.1 Sampling methodology

The methodology used for the April 2025 sampling event was completed in accordance with the SAQP (GHD, 2025), 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	– Australian Standard 5667:1998 Water Quality – Sampling, Part 1: Guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples (AS 5667.1:1998). – Australian Standard 5667:1998 Water Quality – Sampling, Part 6: Guidance on the Sampling of rivers and streams (AS 566.6:1998). – Australian Standard 5667:1999 Water Quality – Sampling, Part 12: Guidance on sampling of bottom sediments. – National Environmental Protection (Assessment of Site Contamination) Measure (ASC NEPM) (NEPC, 2013) – PFAS National Environmental Management Plan (NEMP) Version 3.0 (HEPA, 2025)
Sampling methodology	**Groundwater** The groundwater samples were primarily collected from each monitoring well using low-flow sampling methodology. The wells were purged and sampled using Teflon-free dedicated and disposable high-density polyethylene (HDPE) tubing coupled to a peristaltic pump system or a low-flow pump system (for example MicroPurge using HDPE bladders) suited to deep locations. Using this approach, only dedicated disposable sampling equipment will come into contact with the sample, reducing the risk of cross contamination between sampling locations. The collection point will be placed within the screen interval and the flow rate reduced to achieve a low flow sampling effect whereby water is preferentially drawn in through the well screen. This will be verified through monitoring of the water level during sampling and by avoiding to the extent practicable the drawdown of the water in the well due to pumping. Where groundwater samples were unable to be collected using low-flow sampling methodology (i.e. access constraints, equipment malfunction) a bailer was used. For the wells sampled with bailer, a minimum of three well volumes was removed and water removal continued until stabilisation of water quality parameters were achieved. Where recharge is insufficient and there was risk of the well becoming dry, a sample was collected prior to this. **Surface Water** Surface water samples were collected via ‘grab sample’ at the individual surface water sampling locations from within the water column or approximately 0.5 metres below the surface. Care was taken when sampling so that sediment was not disturbed, and that surface film or floating materials were not captured in the sample. At each location, a new laboratory supplied container was lowered into the water (either by hand or using an extendable sampling pole) with the cap immediately applied once the container was full. **Sediment** Sediment samples are representative of potentially deposited sediments and collected from a depth from within the water body using a hand trowel to a maximum depth of 0.3m below the sediment surface. If this is not possible (due to embankment instability and/or high surface water depth), samples will be collected using a hand auger. A new laboratory supplied container was used at each location for collection of samples. **Tank Water** Water samples were collected from tanks and/or open pits using the following methodology: – OTH001 (Training Water Holding Tank [S415]): Sample was collected from tap connected to tank. – OTH002 (Fire Main Water Tank [S416]): The sample was collected using a water sampling pole collect water from the opening at the top of the tank, accessed via a ladder.

Item	Details
	– OTH003 (Surface water Oil Separator Reclaim Pit [S426]): A peristaltic pump was used to collect water from the open pit. – OTH004 (DCTU Holding Tank [S439]): Was not sampled, as the water tap connected to tank is no longer present. – OTH005 (S440 Pit Tank):A peristaltic pump was used to collect water from the open pit. – OTH006 (DLSTRU [S481]): The water sample was collected from a valve tap inside dosing room. A new laboratory supplied container was used at each location for collection of samples. The sample containers were labelled with the job number, sample identification and date collected in accordance with the nomenclature set out in the SAQP (GHD, 2025)
Field parameters	Field parameters (pH, electrical conductivity (EC), redox, dissolved oxygen (DO) and temperature) were measured and recorded for all surface and groundwater water locations. In addition, observations of water quality such as the colour, turbidity level, and the presence/absence of odour or sheen was recorded. Geochemical field parameters were collected using calibrated water quality meters (WQM). The calibration certificates and field calibration records are provided in Appendix D.
QA/QC Samples	The Quality Assurance and Quality Control (QA/QC) program as per the SAQP (2025). The program for this round of sampling includes: For this April 2025 sampling event, the QA/QC samples included: – 32 x intra-laboratory duplicates which met the target frequency – 31 x inter-laboratory duplicates which met the target frequency – 21 x rinsate samples which met the target frequency. – 5 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) (2024). *Australian Drinking Water Guidelines 2011, Version 3.9 updated December 2024*. (NHMRC, 2024)

Quantitative triggers from the Human Health Risk Assessment (HHRA) (GHD, 2019) 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. Whilst not included in the current SAQP, criteria have been applied based on discussions with Defence and will be included in future versions of the SAQP and OMP.

– The following criteria extracted from the HHRA (GHD, 2019) 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, 2020) and SAQP (GHD, 2025). Screening criteria is applied on a catchment basis and is 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

Receptor	Pathway	Compound(s)	Criteria	Guideline	Catchments applied								
					Mary Creek	Flatrock Creek	Captains Lagoon	Telegraph Creek	The Lakes	Clay Pools	Summercloud Creek	Bherwerre Barrier	RAN SSSS Infrastructure
Human health – Groundwater and surface water	Recreational	PFOS + PFHxS	2 µg/L	Surface water bodies in the vicinity of the site are known to be used for recreational purposes. The NEMP 3.0 (HEPA, 2025) recreational criteria, which are consistent with those presented by NHMRC (NHMRC, 2019), have therefore been adopted in the assessment for selected locations.	C	✓	✓	✓	✓	✓	✓	-	-
		PFOA	10 µg/L										
	Drinking Water	PFOS + PFHxS	0.07 µg/L	*Applicable to Lake Windermere surface water only* The ADWG (NHMRC, 2024) are currently the same as the NEMP 3.0 (HEPA, 2025) drinking water guidelines.	-	-	-	-	✓	-	-	-	-
		PFOA	0.56 µg/L										
Ecological – Groundwater and surface water	Freshwater / interim marine	PFOS	0.13 µg/L	PFAS NEMP (HEPA, 2025) 95% species protection levels.	C	C	C	✓	✓	✓	✓	✓	-
		PFOA	220 µg/L										
	Human health – consumption of biota	PFOS + PFHxS	0.01 µg/L	Assessment trigger in the absence of publicly available screening criteria.	-	-	-	✓	✓	✓	-	✓	-
	Human health – Defence personnel	PFOS + PFHxS	39.7 µg/L	Activity specific HHRA EPC for RAN SSSS. Assessment trigger in the absence of publicly available screening criteria.	-	-	-	-	-	-	-	-	✓
Human health – Sediment	Human health – ceremonial	PFOS + PFHxS	0.0002 mg/kg	Assessment trigger in the absence of publicly available screening criteria.	-	-	-	-	-	-	✓	-	-
		PFOS + PFHxS	0.0014 mg/kg	HHRA EPC for clay pools. Assessment trigger in the absence of publicly available screening criteria.	-	-	-	-	-	✓	-	-	-

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, 2025). The data validation assessment is provided in Appendix C**.**

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. 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, Appendix C. The 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 April 2025 sampling event completed over eight days from 31 March to 4 April, 7 to 8 April, and 24 April 2025 are summarised in Table 8.

Table 8 General observations

Items	Observations
Weather Conditions	During the sampling event from 31 March to 8 April 2025, heavy rains and strong winds were observed on 31 March and 1 April and becoming overcast or clear to 8 April. Jervis Bay Airfield (Jervis Bay Airfield AWS Station ID 68264) (Bureau of Meterology, 2025) recorded the maximum daily temperature range to be between 19.0 ˚C and 23.2˚C. Cumulative rainfall was recorded to be 141.2 mm in the 48 hours prior to 9am on the start of the fieldwork program on the 31 March 2025. 16.6 mm and 0.2 mm of rain was recorded in the 24 hours prior to 9am on 1 April and 2 April, respectively. For the groundwater sampling on 24 April 2025, 0.2mm of rainfall was recorded in the 24 hours prior to 9am on 25 April. 110mm of rainfall was recorded in the 48 hours prior to 9am on 24 April. No rainfall was recorded on other days. An assessment of weather data for April 2025 event compared to the last three April events (2022, 2023 and 2024) indicates that the maximum amount of rainfall within a fieldwork program was 114.8 mm for the 2022 event (AECOM, 2022), with 13.6 mm recorded in the 48 hours to 9am on the first day of the program in 2022 (Bureau of Meterology, 2025). However, the 2023 and 2024 events in events had similarly high rainfall in the days preceding the event or during the event, enabling most surface water locations to be sampled. The 2025 sampling event was very similar to the 2024 event (AECOM, 2024) in terms of weather and rainfall preceding and during sampling, this is reflected in similar surface water collection rates between these two events. Flow observations were found to be somewhat higher on the first two days of monitoring in the 2025 event compared to the rest of the event, and higher than the previous monitoring event in October 2024.
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 include water treatment plant construction, storage of equipment and plant, earthworks, stockpiling, vegetation clearance, and plant operation. – Temporary water treatment plant in operation at Mary Creek, located upgradient of surface water location 0021_SW010 and monitoring well locations 0021_MW060, 0021_MW70, 0021_MW072 and 0021_MW072. – Mid-term refresh stockpiling works at HMAS Creswell within Flatrock Creek / Captains Lagoon catchments. – New electrical sub-station east of Benson Road, new building construction on the southern corner of College Road and Benson Road, while construction environmental controls were observed to be in place, the high amount of rainfall preceding the sampling event may have resulted in sediment runoff. These works are located within Captains Lagoon and Flatrock Creek catchments.

4.2 Field observations and measurements

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

Table 9 Summary of field observations and measurements

Item	Description
Access and Sample Collection	Most sampling locations were accessible and able to be sampled except for the following: – 0021_MW115: all access roads to this location were flooded which prevented access to the well. – 0021_SW038 and 0021_SD032: access to this location was restricted due to dense vegetation and steep terrain. – 0021_MW055: required use of a metal detector to locate the well as it was covered in topsoil and grass
Monitoring Well Network Condition	Most monitoring wells were in a fair condition, with the exception of the following: – 0020_MW001: Well difficult to open, gatic bolt rusted, one side of casing cracked – 0020_MW115: Blockage encountered in well at 2.3 metres below top of casing (mbTOC), interface probe pushed down to 3.74 mbTOC, expected depth is ~4.80 mbTOC. – 0021_MW117, 0021_MW118, and 0021_MW150: Water above well cap, dewatered before opening – 0021_MW127: Potential blockage encountered at bottom of well, well depth ~0.3m higher than expected. – 0021_MW154: Potential blockage encountered at bottom of well, well depth ~1.2m higher than expected and above screen. – 0021_MW020, 0021_MW124, and 0021_MW128: Monument lid no longer sits and closes properly on monument – 0021_MW150 to 0021_MW155: All gatic covers are in a very poor state, with gatic lids broken or missing, PVC cracked. Maintenance of the existing wells is scheduled for May 2025, which includes repair or replacement of gatic covers and/or monuments, and replacement of worn well caps.
Water Observations	**Surface Water** The following surface water observations were made: – Water colour ranged from clear to coloured (yellow, brown to dark brown), mostly low turbidity for all surface water locations where water was flowing. Locations where water was not flowing were usually recorded having higher turbidity and suspended solids. – Locations 0020_SW010, 0020_SW032, 0020_SW036, 0021 _SW012, 0021_SW034, 0021_SW037, 0021_SW044, 0021_SW053, 0021_SW058, 0021_SW060, 0021_SSW068 and 0021_SW127 were noted to have foam 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 or a result of increased surface water runoff due to recent rainfall. – An organic/decaying organics odour was noted at surface water locations 0020_SW026, 0021_SW024, 0021_SW025, 0021_SW032 and 0021_SW034. – A rotten egg-like odour (potential Hydrogen Sulphide) was noted at surface water location 0020_SW029. – A sewerage odour was noted at surface water location 0020_SW035 and 0020_SW036 (located at the sewerage treatment plant). – A chlorine odour was noted at surface water location 0020_SW037 and 0021_OTH001 (located at the sewerage treatment plant and Training Water Holding Tank [S415] respectively). – All locations were observed to be flowing or tidally influenced, except for the following: • Lakes, swamps, and treatment ponds and treatment plants: 0020_SW016, 0020_SW018, 0020_SW035, 0020_SW036, 0020_SW037, 0021_SW032, 0021_SW034, 0021_SW037 and 0021_SW083. • Clay pools: 0021_SW076, 0021_SW078, 0021_SW079 and 0021_SW080. • Stagnant or ponded streams: 0020_SW022, 0020_SW033, 0021_SW001, 0021_SW003, 0021_SW004, 0021_SW010, 0021_SW018, 0021_SW019, 0021_SW020, 0021_SW021, 0021_SW022, 0021_SW024, 0021_SW025, 0021_SW027, 0021_SW048, 0021_SW059, 0021_SW126 and 0021_SW212.

Item	Description
	– Other environmental observations including weather, temperature, slope and erosion were recorded on the field sheets, attached in Appendix F. Photographs of the test locations were taken for all surface water/sediment locations. **Groundwater** The following groundwater observations were made: – Water colour ranged from clear to coloured (yellow, orange, pale brown to brown to dark brown). Some locations had turbid water; turbidity estimates ranged from low to high turbidity. Some locations had sediment accumulation despite well purging or bailing. – Locations 0020_MW012, 0020_MW017, 0020_MW069, 0020_MW102D, 0020_MW109, 0020_MW110, 0021_MW025, 0021_MW061, 0021_MW065, 0021_MW070, 0021_MW110, 0021_MW111, 0021_MW124, 0021_MW125, 0021_MW131, 0021_MW137, 0021_MW138 and 0021_MW164 had varying degrees of hydrogen sulphide or rotten egg-like odours recorded. – An organic/decaying organics odour was noted at the following groundwater locations: 0021_MW026, 0021_MW028, 0021_MW071, 0021_MW072, 0021_MW109 and 0021_MW130 – A hydrocarbon odour and sheen were noted at location 0021_MW061 and 0021_MW062 (located at the RAN SSSS). Field notes are attached in Appendix F.
Depth to Groundwater and Flow Direction	Depth to groundwater ranged between 0.035 mbTOC (0020_MW052) to 19.324 mbTOC (0021_MW129). Groundwater elevations ranged between 0.615 (0020_MW001) and 78.095 (0021_MW024) metres Australian Height Datum (mAHD). Groundwater gauging data is presented on the field sheets in Appendix F. 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, 2019). 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_MW055 and 0020_MW056, as these wells were dry at the time of sampling. – 0020_MW069, 0020_MW070, 0021_MW071, these newly installed wells have not yet been surveyed. – 0021_MW061 and 0021_MW062 as these wells were gauged at least 16 to 21 days after the wells in the surrounding area. Field notes, including sample collection depth and details on the monitoring well construction are attached in Appendix F.
Geochemical Parameters	**Surface Water** Surface water geochemical parameters were measured during the collection of water samples. The readings are presented in Table B1 in Appendix B and are summarised below: – Dissolved oxygen ranged from 1.08 mg/L (0020_SW032) to 9.26 mg/L (0021_SW076) indicating poor to well oxygenated conditions. – Electrical conductivity ranged from 85.6 µS/cm (0021_SW037) to 86278 µS/cm (0021_SW211) indicating freshwater to saline conditions. – pH ranged from 3.03 (0021_SW059) to 8.45 (0021_SW188) indicating acidic to slightly alkaline conditions. Most samples were near neutral pH, with an average and median pH of 5.94 and 5.87, respectively. – Redox ranged from -95.5 mV (0021_SW060) to 336.6 mV (0020_SW037) indicating reducing to oxidising conditions. – Temperatures ranged from 15.0 ˚C (0021_SW004) to 25.7 ˚C (0021_SW003). Field notes are attached in Appendix F.

Item	Description
	Groundwater Groundwater geochemical parameters were measured during the collection of water samples. The readings are presented in Table B2 in Appendix B and are summarised below: – Dissolved oxygen ranged from 0.01 mg/L (0020_MW007, 0021_MW063, 0021_MW136, 0021_MW164) to 6.46 mg/L (0021_MW101) indicating poor to well oxygenated conditions. – Electrical conductivity ranged from 88.8 µS/cm (0021_MW111) to 25295 µS/cm (0021_MW131) indicating freshwater conditions for all wells with the exception of 0021_MW111, which indicates saline conditions and is consistent with values recorded previously at this location. – pH ranged from 3.9 (0020_MW037) to 7.11 (0020_MW007) indicating acidic to neutral conditions. – Redox ranged from -201.5 mV (0020_MW131) to 362.5 mV (0020_MW104) indicating reducing to oxidising conditions. – Temperatures ranged from 17.3 ˚C (0021_MW072 and 0021_MW132) to 24.0 ˚C (0020_MW007). Field notes are attached in Appendix F.
Sediment Observations	Sediment sampled and logged during this monitoring event comprised of sand, silt and clay materials with minor inclusions of gravel 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 10 sediment locations (0020_SD024, 0021_SD006, 0021_SD021, 0021_SD028, 0021_SD049, 0021_SD050, 0021_SD066, 0021_SD068, 0021_SD070, 0021_SD080). Field notes are attached in Appendix F.

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 B4h, Appendix B. A Summary of current events results are provided below.

Summary of the groundwater analytical results:

– 62 primary samples reported PFOS+PFHxS concentrations above the LOR.
– 31 primary samples reported PFOA concentrations above the LOR.
– 25 of 85 primary samples reported concentrations which exceeded the adopted human health screening criteria for PFOS+PFHxS:
  - One sample (0021_MW137, pathway location) exceeded the biota consumption human health screening criterion.
  - 24 samples exceeded the recreational human health screening criterion.
– 41 of 85 primary samples reported PFOS concentrations which exceeded the adopted ecological screening criteria.
– No groundwater samples exceeded the adopted ecological or recreational human health screening criteria for PFOA.
– First time detections:
  - Two recently drilled wells sampled for the first time (0020_MW069 and 0020_MW070) reported first time detections for PFOS and PFHxS. 0020_MW070 exceeded the ecological screening criterion for PFOS. 0020_MW069 did not exceed any of the adopted screening criteria.
  - There was one first time detection for PFOA in groundwater at 0021_MW131 (Summercloud Creek catchment to the southeast of Wreck Bay village).

- No other groundwater locations reported first time detections for PFOS+PFHxS, PFOS, and/or PFOA.

Summary of the surface water and tank water analytical results:

– 48 primary samples reported PFOS+PFHxS concentrations above the LOR.
– 14 primary samples reported PFOA concentrations above the LOR.
– 10 of 72 primary samples reported concentrations which exceeded the adopted human health screening criteria for PFOS+PFHxS.
  - Seven surface water samples exceeded the recreational human health screening criterion.
    – 0021_SW001 at Captains Lagoon catchment, source location.
    – 0021_SW019 and 0021_SW126 at Captains Lagoon catchment, pathway locations.
    – 0021_SW127 and 0021_SW130 at Mary Creek catchment, source locations.
    – 0021_SW010 and 0021_SW053 at Mary Creek catchment, pathway locations.
  - Three surface water samples exceeded the biota consumption human health screening criterion.
    – 0021_SW079 and 0021_SW080 at Mary Creek catchment, receptor locations.
    – 0021_SW068 at Telegraph Creek catchment, receptor location.
  - The laboratory duplicate surface water sample for 0021_SW068 reported concentrations equal to the LOR and the human health consumption of biota screening criterion. The primary sample was below the LOR.
– 17 of 72 primary samples reported PFOS concentrations which exceeded the adopted ecological screening criteria.
– No samples reported PFOS+PFHxS and PFOA concentrations exceeding the adopted drinking water screening criterion.
– No surface water samples exceeded the adopted recreational human health screening criteria for PFOA.
– No surface water samples reported PFOA concentrations which exceeded the adopted ecological screening criteria.
– No samples reported a first-time detection for PFOS+PFHxS, PFOS and/or PFOA.

Summary of the sediment sample analytical results:

– 40 primary samples reported PFOS+PFHxS concentrations above the LOR.
– 7 primary samples reported PFOA concentrations above the LOR.
– 3 out of 60 primary samples reported concentrations above the adopted human health screening criteria for PFOS+PFHxS.
  - Three of the five primary sediment samples collected within the clay pools catchment exceeded the HHRA EPC for clay pools criterion (noting the results were in the same order of magnitude).
  - None of the four primary samples collected within the Summercloud Creek catchment exceeded the human health ceremonial site specific criterion.
– No sediment samples reported a first-time detection for PFOS+PFHxS, PFOS and/or PFOA.

4.3.2 Previous data

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

Laboratory results are attached in Appendix E. All historical sampling results are presented in Tables B5a to B5j and B6a to B6h, Appendix B.

Surface water and tank samples

Table 10 Deviations from historical dataset – surface water and tank samples

Item	Sample location	Catchment	Source-Pathway-Receptor	PFOS+PFHxS (µg/L)		PFOA (µg/L)		PFOS (µg/L)	
				April 2025	Previous Max	April 2025	Previous Max	April 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?	0021_SW068	Telegraph Creek	Receptor	0.01	NA	NA	NA	0.01	NA
	0021_SW079	Clay Pools	Receptor	0.06	NA	NA	NA	0.04	NA
	0021_SW080	Clay Pools	Receptor	0.03	NA	NA	NA	0.02	NA
New exceedance of ecological criteria?	NA	NA	NA	NA	NA	NA	NA	NA	NA
New historical maximum?	0021_SW052	Mary Creek	Receptor	1.61	1.56	NA	NA	1.04	0.902
	0021_SW212	Bherwerre Barrier	Receptor	<0.01	0.0065	<0.01	<0.0005	0.0048	<0.01

There were no first-time detections for PFOS+PFHxS, PFOS, and/or PFOA in the surface water samples analysed.

There were three new exceedances of the adopted human health criteria reported at 0021_SW068, 0021_SW079 and 0021_SW080 (receptor locations). However, this is the first time the consumption of biota criterion has been applied, and higher historical maximums have been reported previously.

There were no new exceedances of the ecological criteria reported.

Two locations reported a new historical maximum:

– 0021_SW052 (receptor location) recorded PFOS+PFHxS and PFOS concentrations were less than one order of magnitude higher than the previously recorded maximum.

– 0021_SW212 (receptor location) recorded concentrations below the LOR, however, the LOR for this location is higher than previous sampling events.

There were no first-time detections of PFOS+PFHxS, PFOS, and/or PFOA.

Groundwater

Table 11 Deviations from historical dataset – groundwater samples

Item	Sample location	Catchment	Source-Pathway-Receptor	PFOS+PFHxS (µg/L)		PFOA (µg/L)		PFOS (µg/L)	
				April 2025	Previous Max	April 2025	Previous Max	April 2025	Previous Max
First time detections of PFOS+PFHxS, PFOS or PFOA?	0020_MW069	Flatrock Creek	Pathway	0.09	NA	NA	NA	0.06	NA
	0020_MW070	Captains Lagoon	Pathway	0.65	NA	NA	NA	0.50	NA
	0021_MW131	Summercloud Creek	Pathway	NA	NA	0.02	NA	NA	NA
New exceedance of human health criteria?	0021_MW137	Lakes	Pathway	0.019	0.0035	N/A	N/A	0.0129	0.003
New exceedance of ecological criteria?	0020_MW070	Captains Lagoon	Pathway	NA	NA	NA	NA	0.50	NA
New historical maximum?	0020_MW052	Captains Lagoon	Source	NA	NA	NA	NA	0.02	0.01
	0020_MW069	Flatrock Creek	Pathway	0.09	NA	NA	NA	0.06	NA
	0020_MW070	Captains Lagoon	Pathway	0.65	NA	NA	NA	0.50	NA
	0020_MW111	Flatrock Creek	Pathway	20.5	15.7	NA	NA	18.6	14.4
	0021_MW030	Captains Lagoon	Source	0.06	0.0033	NA	NA	0.04	0.0021
	0021_MW127	Captains Lagoon	Source	1.37	0.73	0.03	0.02	0.64	0.34
	0021_MW131	Summercloud Creek	Pathway	0.32	0.29	NA	NA	0.16	0.14
	0021_MW137	Lakes	Pathway	0.019	0.0035	NA	NA	0.0129	0.003
	0021_MW150	Mary Creek	Source	NA	NA	0.36	0.30	NA	NA
	0021_MW151	Mary Creek	Source	18	17.7	NA	NA	9.4	8.94
	0021_MW153	Mary Creek	Source	NA	NA	NA	NA	18.5	17.3
	0021_MW154	Mary Creek	Source	NA	NA	NA	NA	20.2	15.7

Three groundwater sampling locations (0020_MW069, 0020_MW070, and 0021_MW131, pathway locations) reported first-time detections or exceedances of the adopted screening criteria for PFOS+PFHxS, PFOS and/or PFOA in the groundwater samples analysed. Two of these locations are newly installed wells replacing existing wells:

– 0020_MW069, replacing 0020_MW008, recorded a concentration of PFOS+PFHxS higher but within the same order of magnitude to that previously recorded at 0020_MW008.

– 0020_MW070, replacing 0020_MW108, recorded a concentration of PFOS+PFHxS lower and within the same of magnitude as that previously recorded at 0020_MW008.

There are new human health exceedances for PFOS+PFHxS and PFOS for 0021_MW137 (pathway location). This is the first time the consumption of biota criterion has been applied, and the result is also a historical maximum for this location.

There is one new ecological exceedance for PFOS (at 0020_MW070, pathway location), this is the first time this location has been sampled.

There were 10 locations where new historical maximums were recorded. All reported concentrations less than one order of magnitude higher than the previously reported maximum, with the exception of PFOS in 0021_MW030 (source location) which had concentrations more than one order of magnitude higher than the previously recorded maximum (0.0021 µg/L in 2017). However, it is noted that a quality control sample collected at this location during the April 2025 sampling event reported concentrations <0.1 µg/L.

Sediment

Table 12 Deviations from the historical dataset – sediment

Item	Sample location	Catchment	Source-Pathway-Receptor	PFOS+PFHxS (mg/kg)		PFOA (mg/kg)		PFOS (mg/kg)	
				April 2025	Previous Max	April 2025	Previous Max	April 2025	Previous Max
First time detections of PFOS+PFHxS, PFOS or PFOA?	NA	NA	NA	NA	NA	NA	NA	NA	NA
New exceedance of human health criteria?	0021_SD067	Clay Pools	Receptor	0.0021	NA	NA	NA	0.0017	NA
	0021_SD069	Clay Pools	Receptor	0.0041	NA	NA	NA	0.0038	NA
	0021_SD070	Clay Pools	Receptor	0.0114	0.0049	NA	NA	0.0107	0.0039
New historical maximum?	0020_SD025	Captains Lagoon	Pathway	0.0278	0.0124	NA	NA	0.0202	0.0107
	0021_SD016	Flatrock Creek	Pathway	0.0501	0.0284	NA	NA	0.0398	0.0258
	0021_SD017	Captains Lagoon	Pathway	0.0957	0.0552	0.0009	0.0006	0.0845	0.0493
	0021_SD028	Lakes	Receptor	0.0008	0.0002	NA	NA	0.0008	0.0002
	0021_SD070	Clay Pools	Receptor	0.0114	0.0049	NA	NA	0.0107	0.0039

There were no first-time detections of PFOS+PFHxS, PFOS and/or PFOA in the sediment samples analysed.

There are three new human health exceedances for PFOS+PFHxS and PFOS at 0021_SD067, 0021_SD069, and 0021_SD070 (receptor locations). This is the first time the activity specific HHRA EPC for clay pools criterion has been applied to these locations. Concentrations in 0021_SD067 and 0021_SD069 and less than the historical maximum for their respective locations, concentrations at 0021_SD070 are a new historical maximum for this location.

There were five locations where new historical maximums were recorded (pathway and receptor locations). All reported concentrations were less than one order of magnitude of the previous recorded maximum.

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 sampling event

Item	Comment	Recommended Action
Access to sampling locations	The following locations were unable to be accessed, as discussed in Table 5: – One groundwater well. – One surface water location. – One sediment location. – One tank location.	Access to locations will be attempted again during the next scheduled sampling event to continue monitoring of the location as per the OMP.
Location unable to be located, dry or no media	The following locations were not sampled: – Two groundwater monitoring wells were dry and not able to be sampled. – Seven surface water locations were dry and not able to be sampled. – Three sediment locations did not have sediment to enable sampling.	Sampling will be attempted during the next scheduled sampling event to continue monitoring of the location as per the OMP. The two groundwater locations (0020_MW055 and 0020_MW056) are used in the mass flux assessment, changing the wells used in the mass flux assessment should be considered if these wells remain dry.
Well depth incorrect	– The measured depth of 0021_MW154 was approximately 1.2m higher than anticipated.	Attempt to clear blockage during next monitoring event.
Analytical results	– 72 surface water primary samples were analysed. – 60 sediment primary samples were analysed. – 85 groundwater water primary samples were analysed. – tank water primary samples were analysed.	Locations will be sampled again during the next scheduled sampling event to continue monitoring of the location as per the OMP.
First-time detections of PFOS+PFHxS, PFOS and/or PFOA	The following first-time detections of PFOS+PFHxS, PFOS and/or PFOA were reported: – Three groundwater locations.	Locations will be sampled again during the next scheduled sampling event to continue monitoring of the location as per the OMP. – Two of the newly installed wells have recorded results within a similar order of magnitude to the previous data set at the former well, and will continue to be samples as per the OMP.
New exceedance of adopted human health screening criteria	New exceedances were reported exceeding the human health screening criteria for PFOS+PFHxS and PFOS at: – Three surface water locations for consumption of biota criterion. – One monitoring well for the consumption of biota criterion. – Three sediment location for HHRA EPC for clay pools criterion.	New exceedances are related to the application of new criteria for the first time. Higher historical maximums were reported previously in the same locations, with the exception of samples 0021_MW137 and 0021_SD070.
New exceedance of adopted ecological screening criteria	There was one new exceedance reported exceeding the ecological screening criteria reported at 0020_MW070 for PFOS.	Locations will be sampled again during the next scheduled sampling event to continue monitoring of the location as per the OMP. Location 0020_MW070 was sampled for the first time and replaces location 0020_MW108. 0020_MW108 historically recorded higher concentrations than

Item	Comment	Recommended Action
		the result recorded at 0020_MW070 during this monitoring round.
New historical maximum recorded	The following new historical maximums were recorded: – Two locations – surface water. – 12 locations – groundwater. – Five locations – sediment.	One result (0021_MW030 for PFOS) recorded concentrations more than one order of magnitude higher than the previous recorded result (0.0021 µg/L in 2017). Locations will be sampled again during the next scheduled sampling event to continue monitoring of the location as per the OMP. 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 October 2025. Maintenance of the existing wells is scheduled for May 2025, which includes repair or replacement of gatic covers and/or monuments, and replacement of worn well caps.

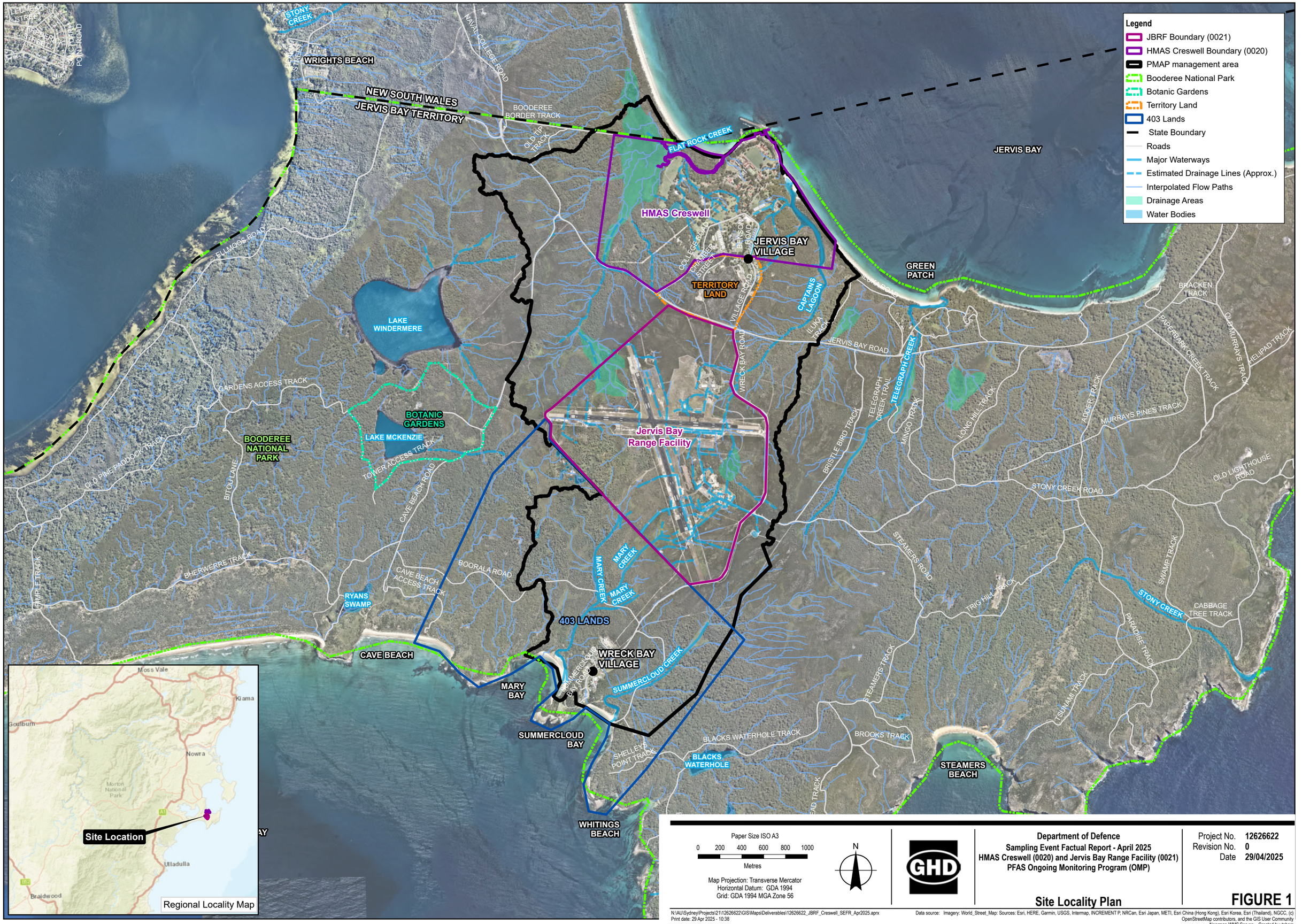
5.3 Upcoming ongoing monitoring report

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

Appendices

Appendix A

Figures



Paper Size ISO A3

0 200 400 600 800 1000

Metres

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

N

GHD

Department of Defence
Sampling Event Factual Report - April 2025
HMAS Creswell (0020) and Jervis Bay Range Facility (0021)
PFAS Ongoing Monitoring Program (OMP)

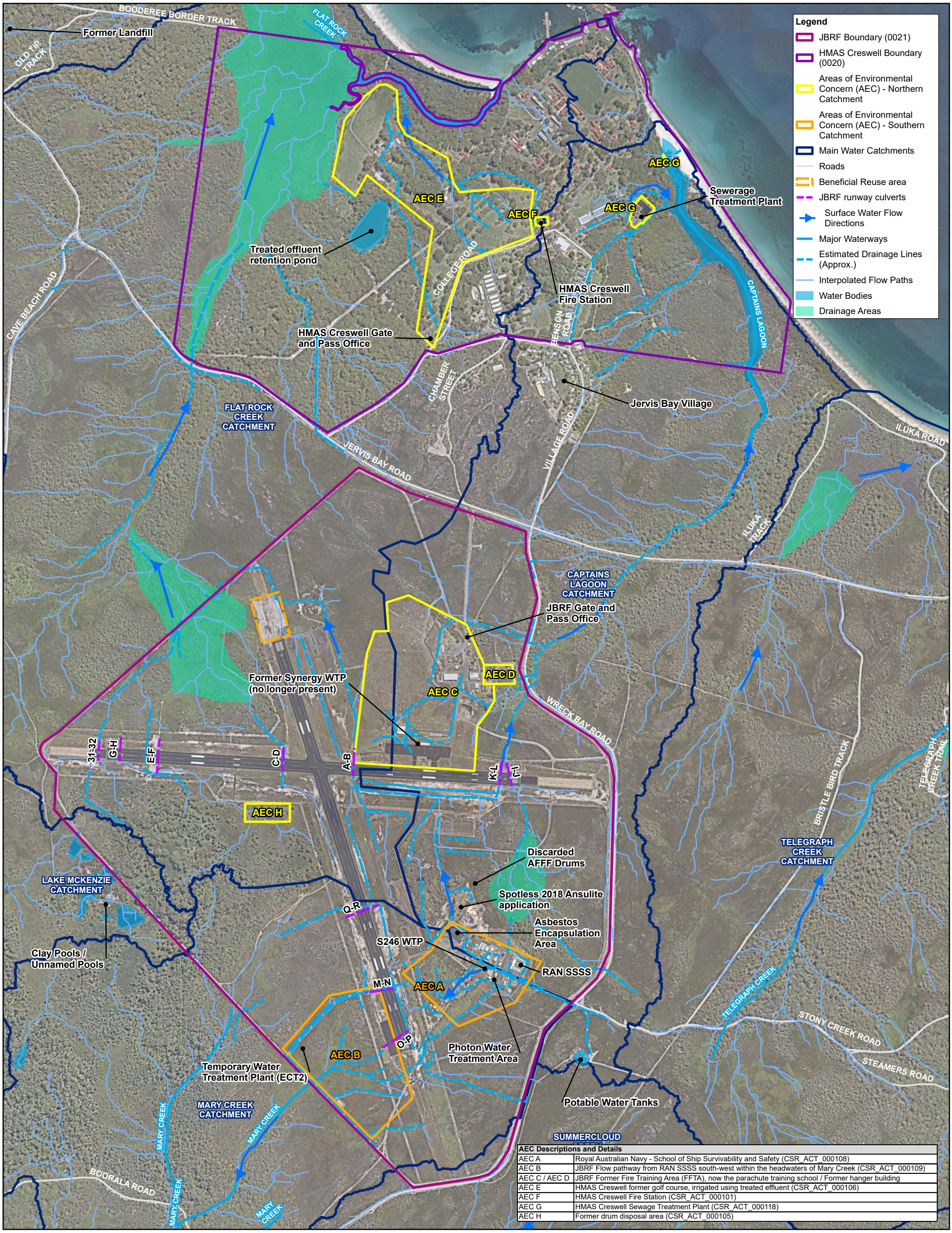
Site Locality Plan

Project No. **12626622**
Revision No. **0**
Date **29/04/2025**

FIGURE 1

N:\AU\Sydney\Projects\21\12626622\GIS\Maps\Deliverables\12626622_JBRF_Creswell_SEFR_Apr2025.aprx
Print date: 29 Apr 2025 - 10:38

Data source: Imagery: World_Street_Map: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community
Nearmap WMS Server: . Created by: tnham



AEC Descriptions and Details	
AEC A	Royal Australian Navy - School of Ship Survivability and Safety (CSR_ACT_000108)
AEC B	JBRF Flow pathway from RAN SSSS south-west within the headwaters of Mary Creek (CSR_ACT_000109)
AEC C / AEC D	JBRF Former Fire Training Area (FFTA), now the parachute training school / Former hanger building
AEC E	HMAS Creswell former golf course, irrigated using treated effluent (CSR_ACT_000106)
AEC F	HMAS Creswell Fire Station (CSR_ACT_000101)
AEC G	HMAS Creswell Sewage Treatment Plant (CSR_ACT_000118)
AEC H	Former drum disposal area (CSR_ACT_000105)

Paper Size ISO A3

0 100 200 300 400

Metres

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

N

GHD

Department of Defence
Sampling Event Factual Report - April 2025
HMAS Creswell (0020) and Jervis Bay Range Facility (0021)
PFAS Ongoing Monitoring Program (OMP)

Site Layout

Project No. **12550948**
Revision No. **0**
Date **29/04/2025**

FIGURE 2

N:\AU\Sydney\Projects\21\12626622\GIS\Maps\Deliverables\12626622_JBRF_Creswell_SEFR_Apr2025.aprx
Print date: 29 Apr 2025 - 10:39

Data source: Imagery Nearmap WMS Server: . Created by: tnham

Legend

- JBRF Site Boundary (0021)
- HMAS Creswell Site Boundary (0020)
- Main Water Catchments
- Indicative Monitoring Area (digitised from AECOM SEFR, Oct 2023)
- Areas of Environmental Concern (AEC) - Northern Catchment
- Areas of Environmental Concern (AEC) - Southern Catchment
- Roads
- Major Waterways
- Estimated Drainage Lines (Approx.)
- Interpolated Flow Paths
- Water Bodies
- Drainage Areas

Sampling Locations (GHD, 2025)

- Groundwater well
- Surface water sample
- Sediment sample
- Tank sample

LAKE WINDERMERE CATCHMENT
LAKE WINDERMERE
LAKE MCKENZIE
LAKE MCKENZIE CATCHMENT
BHERWERRE BARRIER CATCHMENT
RYANS SWAMP
FLAT ROCK CREEK
FLAT ROCK CREEK CATCHMENT
CAPTAINS LAGOON
CAPTAINS LAGOON CATCHMENT
TELEGRAPH CREEK CATCHMENT
TELEGRAPH CREEK
MARY CREEK CATCHMENT
MARY CREEK
STONY CREEK
SUMMERCLOUD CREEK CATCHMENT
SUMMERCLOUD CREEK
BLACKS WATERHOLE

Paper Size ISO A3

0 200 400 600 800 1000

Metres

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

N

GHD

Department of Defence
Sampling Event Factual Report - April 2025
HMAS Creswell (0020) and Jervis Bay Range Facility (0021)
PFAS Ongoing Monitoring Program (OMP)

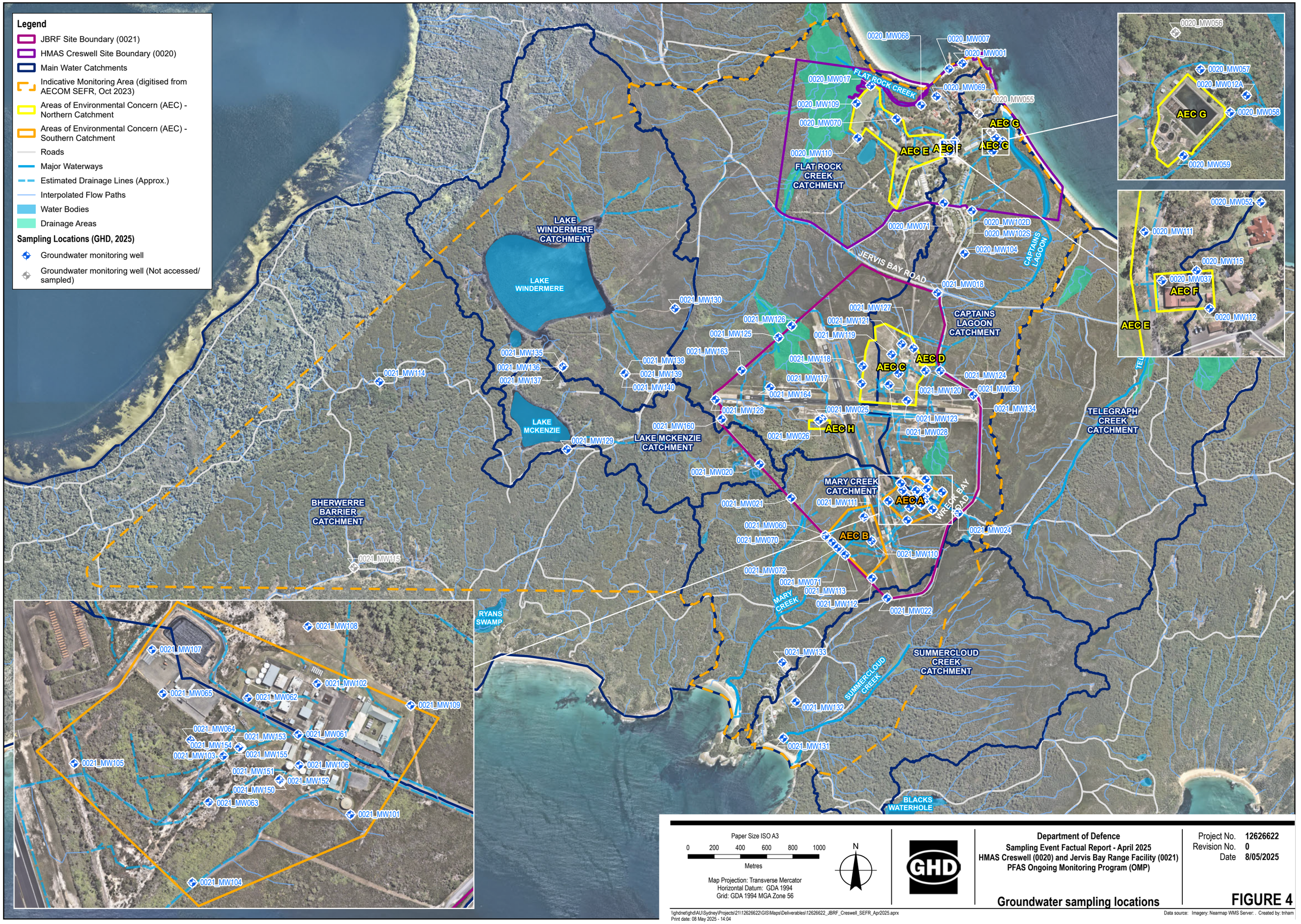
Overview of Locations

Project No. **12626622**
Revision No. **0**
Date **8/05/2025**

FIGURE 3

\\ghdnet\ghd\AU\Sydney\Projects\21\12626622\GIS\Maps\Deliverables\12626622_JBRF_Creswell_SEFR_Apr2025.aprx
Print date: 08 May 2025 - 14:01

Data source: Imagery: Nearmap WMS Server: . Created by: tnham


Legend
JBRF Site Boundary (0021)
HMAS Creswell Site Boundary (0020)
Main Water Catchments
Indicative Monitoring Area (digitised from AECOM SEFR, Oct 2023)
Areas of Environmental Concern (AEC) - Northern Catchment
Areas of Environmental Concern (AEC) - Southern Catchment
Roads
Major Waterways
Estimated Drainage Lines (Approx.)
Interpolated Flow Paths
Water Bodies
Drainage Areas
Sampling Locations (GHD, 2025)
Groundwater monitoring well
Groundwater monitoring well (Not accessed/ sampled)
LAKE WINDERMERE CATCHMENT
LAKE WINDERMERE
LAKE MCKENZIE
LAKE MCKENZIE CATCHMENT
BHERWERRE BARRIER CATCHMENT
RYANS SWAMP
FLAT ROCK CREEK CATCHMENT
FLAT ROCK CREEK
CAPTAINS LAGOON CATCHMENT
CAPTAINS LAGOON
JERVIS BAY ROAD
MARY CREEK CATCHMENT
MARY CREEK
WRECK BAY ROAD
SUMMERCLOUD CREEK CATCHMENT
SUMMERCLOUD CREEK
TELEGRAPH CREEK CATCHMENT
BLACKS WATERHOLE
AEC A
AEC B
AEC C
AEC D
AEC E
AEC F
AEC G
AEC H
0020_MW056
0020_MW057
0020_MW012A
0020_MW058
0020_MW059
0020_MW052
0020_MW111
0020_MW115
0020_MW037
0020_MW112
0021_MW108
0021_MW107
0021_MW102
0021_MW065
0021_MW062
0021_MW109
0021_MW064
0021_MW153
0021_MW061
0021_MW154
0021_MW103
0021_MW155
0021_MW105
0021_MW151
0021_MW106
0021_MW152
0021_MW150
0021_MW063
0021_MW101
0021_MW104
Paper Size ISO A3
0 200 400 600 800 1000
Metres
Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56
N
Department of Defence
Sampling Event Factual Report - April 2025
HMAS Creswell (0020) and Jervis Bay Range Facility (0021)
PFAS Ongoing Monitoring Program (OMP)
Groundwater sampling locations
Project No. 12626622
Revision No. 0
Date 8/05/2025
FIGURE 4
\\ghdnet\ghd\AU\Sydney\Projects\21\12626622\GIS\Maps\Deliverables\12626622_JBRF_Creswell_SEFR_Apr2025.aprx
Print date: 08 May 2025 - 14:04
Data source: Imagery: Nearmap WMS Server: . Created by: tnham

Legend

- JBRF Site Boundary (0021)
- HMAS Creswell Site Boundary (0020)
- Main Water Catchments
- Indicative Monitoring Area (digitised from AECOM SEFR, Oct 2023)
- Areas of Environmental Concern (AEC) - Northern Catchment
- Areas of Environmental Concern (AEC) - Southern Catchment
- Roads
- Major Waterways
- Estimated Drainage Lines (Approx.)
- Interpolated Flow Paths
- Water Bodies
- Drainage Areas

Sampling Locations (GHD, 2025)

- Surface water sample location
- Surface water sample location (Not accessed/ sampled)

NAVAL COLLEGE ROAD
FLAT ROCK CREEK
0020_SW033
0020_SW029
0020_SW026
0020_SW027
0020_SW054
0020_SW018
0020_SW016
0020_SW023
0020_SW022
FLAT ROCK CREEK CATCHMENT
0020_SW030
0020_SW010
0020_SW032
JERVIS BAY ROAD
CAPTAINS LAGOON
LAKE WINDERMERE CATCHMENT
0021_SW038
LAKE WINDERMERE
0021_SW036
0021_SW040
0021_SW037
CAPTAINS LAGOON CATCHMENT
0020_SW011
0021_SW064
0021_SW027
0021_SW022
0021_SW024
0021_SW025
0021_SW013
0021_SW020
0021_SW021
0021_SW032
LAKE MCKENZIE CATCHMENT
LAKE MCKENZIE
0021_SW034
0021_SW080
0021_SW079
0021_SW078
0021_SW077
0021_SW076
0021_SW035
0021_SW019
0021_SW126
0021_SW018
TELEGRAPH CREEK CATCHMENT
TELEGRAPH CREEK
0021_SW069
0021_SW068
0021_SW060
0021_SW062
BHERWERRE BARRIER CATCHMENT
0021_SW212
0021_SW048
MARY CREEK
0021_SW010
0021_SW011
0021_SW059
MARY CREEK CATCHMENT
0021_SW045
0021_SW053
0021_SW058
RYANS SWAMP
0021_SW083
0021_SW044
WRECK BAY ROAD
SUMMERCLOUD CREEK CATCHMENT
SUMMERCLOUD CREEK
0021_SW043
0021_SW052
0021_SW051
0021_SW057
0021_SW211
0021_SW056
0021_SW188
0021_SW085
BLACKS WATERHOLE

0020_SW012
0020_SW004
0020_SW037
0020_SW005
0020_SW035
0020_SW036
0020_SW057
CAPTAINS LAGOON

0021_SW001
0021_SW017
0021_SW110
0021_SW111
0021_SW112
0021_SW130
0021_SW002
0021_SW012
0021_SW153
0021_SW003
0021_SW127
0021_SW016
0021_SW005
0021_SW004
0021_SW006
MARY CREEK
WRECK BAY ROAD

Paper Size ISO A3

0 200 400 600 800 1000

Metres

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

N

GHD

Department of Defence
Sampling Event Factual Report - April 2025
HMAS Creswell (0020) and Jervis Bay Range Facility (0021)
PFAS Ongoing Monitoring Program (OMP)

Surface water sampling locations

Project No. **12626622**
Revision No. **0**
Date **8/05/2025**

FIGURE 5

N:\AU\Sydney\Projects\21\12626622\GIS\Maps\Deliverables\12626622_JBRF_Creswell_SEFR_Apr2025.aprx
Print date: 08 May 2025 - 18:18

Data source: Imagery: Nearmap WMS Server: . Created by: tnham

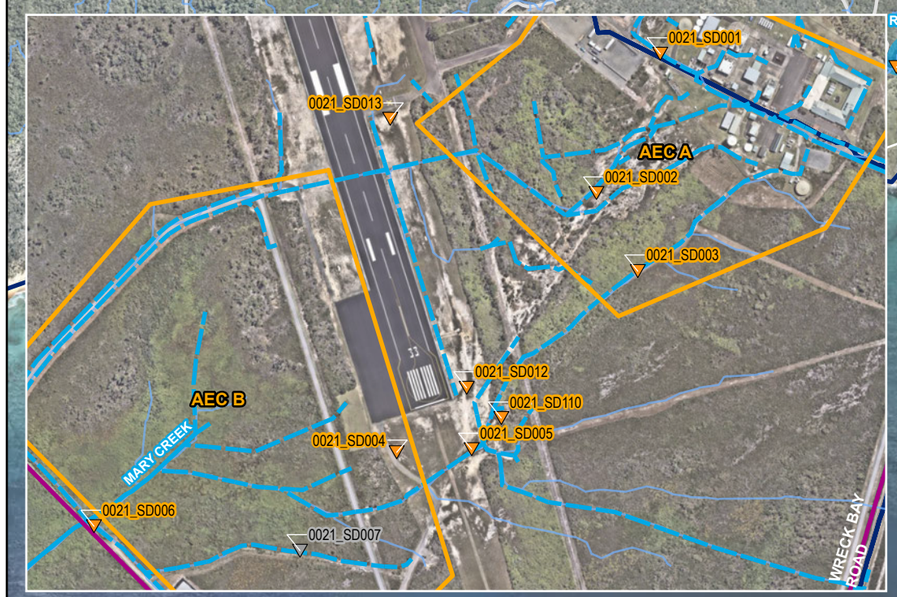
Legend

- JBRF Site Boundary (0021)
- HMAS Creswell Site Boundary (0020)
- Main Water Catchments
- Indicative Monitoring Area (digitised from AECOM SEFR, Oct 2023)
- Areas of Environmental Concern (AEC) - Northern Catchment
- Areas of Environmental Concern (AEC) - Southern Catchment
- Roads
- Major Waterways
- Estimated Drainage Lines (Approx.)
- Interpolated Flow Paths
- Water Bodies
- Drainage Areas

Sampling Locations (GHD, 2025)

- Sediment sample location
- Sediment sample location (Not accessed/ sampled)

NAVAL COLLEGE ROAD
FLAT ROCK CREEK
0020_SD001
0020_SD007
0020_SD004
0020_SD002
0020_SD026
AEC E
0020_SD033
AEC G
0020_SD018
AEC F
AEC G
0020_SD019
0020_SD028
0020_SD032
FLAT ROCK CREEK CATCHMENT
LAKE WINDERMERE CATCHMENT
0021_SD032
0020_SD024
0020_SD006
JERVIS BAY ROAD
CAPTAINS LAGOON
0021_SD059
0021_SD058
0021_SD050
LAKE WINDERMERE
0021_SD030
0021_SD093
0020_SD025
0021_SD054
CAPTAINS LAGOON CATCHMENT
0021_SD031
0021_SD052
0021_SD018
0021_SD020
0021_SD023
AEC D
AEC C
0021_SD009
0021_SD021
TELEGRAPH CREEK CATCHMENT
0021_SD080
LAKE MCKENZIE CATCHMENT
0021_SD016
0021_SD017
AEC H
LAKE MCKENZIE
0021_SD028
0021_SD029
0021_SD070
0021_SD069
0021_SD015
0021_SD068
0021_SD014
0021_SD067
0021_SD066
AEC A
0021_SD011
BHERWERRE BARRIER CATCHMENT
0021_SD040
AEC B
MARY CREEK
MARY CREEK CATCHMENT
0021_SD049
RYANS SWAMP
0021_SD037
0021_SD111
0021_SD073
0021_SD048
0021_SD036
WRECK BAY ROAD
SUMMERCLOUD CREEK CATCHMENT
0021_SD035
SUMMERCLOUD CREEK
0021_SD047
0021_SD043
0021_SD044
0021_SD046
0021_SD188
0021_SD075
BLACKS WATERHOLE



Paper Size ISO A3

0 200 400 600 800 1000

Metres

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

N

GHD

Department of Defence
Sampling Event Factual Report - April 2025
HMAS Creswell (0020) and Jervis Bay Range Facility (0021)
PFAS Ongoing Monitoring Program (OMP)

Sediment sampling locations

Project No. **12626622**
Revision No. **0**
Date **8/05/2025**

FIGURE 6

\\ghdnet\ghd\AU\Sydney\Projects\21\12626622\GIS\Maps\Deliverables\12626622_JBRF_Creswell_SEFR_Apr2025.aprx
Print date: 08 May 2025 - 14:21

Data source: Imagery: Nearmap WMS Server: . Created by: tnham

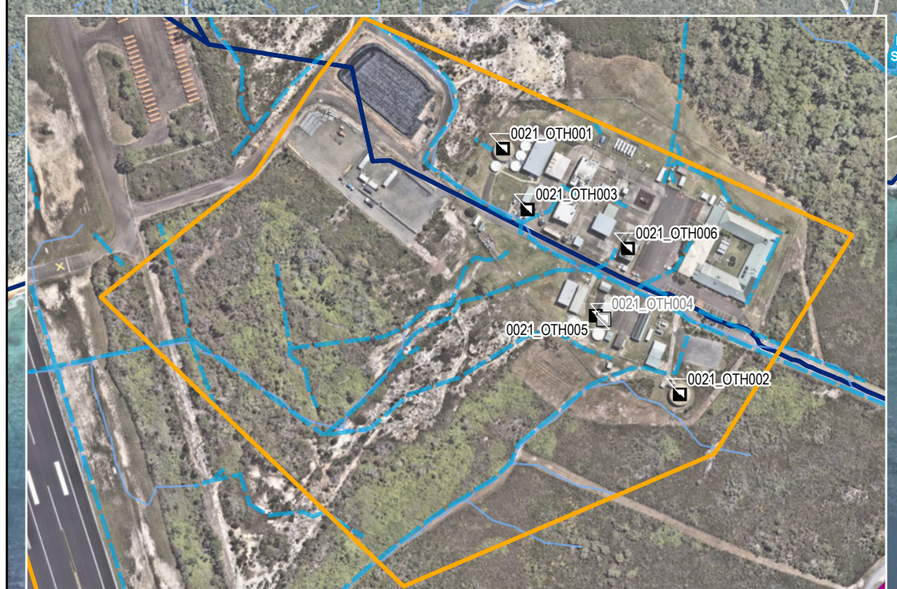
Legend

- JBRF Site Boundary (0021)
- HMAS Creswell Site Boundary (0020)
- Main Water Catchments
- Indicative Monitoring Area (digitised from AECOM SEFR, Oct 2023)
- Areas of Environmental Concern (AEC) - Northern Catchment
- Areas of Environmental Concern (AEC) - Southern Catchment
- Roads
- Major Waterways
- Estimated Drainage Lines (Approx.)
- Interpolated Flow Paths
- Water Bodies
- Drainage Areas

Sampling Locations (GHD, 2025)

- Tank water sample
- Tank water sample (Not accessed/sampled)

NAVAL COLLEGE ROAD
FLAT ROCK CREEK
AEC E
AEC F
AEC G
AEC G
FLAT ROCK CREEK CATCHMENT
LAKE WINDERMERE CATCHMENT
LAKE WINDERMERE
JERVIS BAY ROAD
CAPTAINS LAGOON
CAPTAINS LAGOON CATCHMENT
TELEGRAPH CREEK
AEC C
AEC D
AEC H
LAKE MCKENZIE
LAKE MCKENZIE CATCHMENT
TELEGRAPH CREEK CATCHMENT
AEC A
BHERWERRE BARRIER CATCHMENT
AEC B
MARY CREEK CATCHMENT
MARY CREEK
RYANS SWAMP
WRECK BAY ROAD
SUMMERCLOUD CREEK
SUMMERCLOUD CREEK CATCHMENT
BLACKS WATERHOLE



Paper Size ISO A3

0 200 400 600 800 1000

Metres

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

N

GHD

Department of Defence
Sampling Event Factual Report - April 2025
HMAS Creswell (0020) and Jervis Bay Range Facility (0021)
PFAS Ongoing Monitoring Program (OMP)

Tank sampling locations

Project No. **12626622**
Revision No. **0**
Date **8/05/2025**

FIGURE 7

\\ghdnet\ghd\AU\Sydney\Projects\21\12626622\GIS\Maps\Deliverables\12626622_JBRF_Creswell_SEFR_Apr2025.aprx
Print date: 08 May 2025 - 13:50

Data source: Imagery: Nearmap WMS Server: . Created by: tnham

Paper Size ISO A3

0 200 400 600 800 1000

Metres

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

N

GHD

Department of Defence
Sampling Event Factual Report - April 2025
HMAS Creswell (0020) and Jervis Bay Range Facility (0021)
PFAS Ongoing Monitoring Program (OMP)

Groundwater contours

Project No. **12626622**
Revision No. **0**
Date **8/05/2025**

FIGURE 8

\\ghdnet\ghd\AU\Sydney\Projects\21\12626622\GIS\Maps\Deliverables\12626622_JBRF_Creswell_SEFR_Apr2025.aprx
Print date: 08 May 2025 - 14:25

Data source: Imagery: Nearmap WMS Server: . Created by: tnham

Legend

- JBRF Site Boundary (0021)
- HMAS Creswell Site Boundary (0020)
- Main Water Catchments
- Indicative Monitoring Area (digitised from AECOM SEFR, Oct 2023)
- Areas of Environmental Concern (AEC) - Northern Catchment
- Areas of Environmental Concern (AEC) - Southern Catchment
- Roads
- Major Waterways
- Estimated Drainage Lines (Approx.)
- Interpolated Flow Paths
- Water Bodies
- Drainage Areas

Groundwater sample analytical results

- New Exceedence of Human Health and/or Ecological Screening Criteria for PFOS, PFOS+PFHxS, and/or PFOA
- First-Time Detection of PFOS+PFHxS, PFOS and/ or PFOA
- Sampled, no first time detection or exceedance
- Not accessed/sampled

FLAT ROCK CREEK
FLAT ROCK CREEK CATCHMENT
LAKE WINDERMERE CATCHMENT
LAKE WINDERMERE
LAKE MCKENZIE
LAKE MCKENZIE CATCHMENT
BHERWERRE BARRIER CATCHMENT
RYANS SWAMP
MARY CREEK CATCHMENT
MARY CREEK
JERVIS BAY ROAD
WRECK BAY ROAD
CAPTAINS LAGOON
CAPTAINS LAGOON CATCHMENT
TELEGRAPH CREEK CATCHMENT
SUMMERCLOUD CREEK
SUMMERCLOUD CREEK CATCHMENT
BLACKS WATERHOLE

0020_MW056, 0020_MW057, 0020_MW012A, 0020_MW058, AEC G, 0020_MW059
AEC E, AEC F, 0020_MW052, 0020_MW111, 0020_MW115, 0020_MW037, 0020_MW112
0020_MW007, 0020_MW001, 0020_MW017, 0020_MW069, 0020_MW068, 0020_MW055, 0020_MW109, 0020_MW070, 0020_MW110, AEC G, AEC E, AEC F, AEC G
0020_MW071, 0020_MW102S, 0020_MW102D, 0020_MW104, 0021_MW018
0021_MW130, 0021_MW126, 0021_MW125, 0021_MW119, 0021_MW121, 0021_MW127, 0021_MW118, 0021_MW030, 0021_MW124, 0021_MW117, AEC D, AEC C, 0021_MW164, 0021_MW134, 0021_MW120, 0021_MW123, 0021_MW028, 0021_MW163, 0021_MW137, 0021_MW135, 0021_MW136, 0021_MW138, 0021_MW140, 0021_MW139, 0021_MW114, 0021_MW128, 0021_MW160, 0021_MW025, AEC H, 0021_MW026, 0021_MW129, 0021_MW020, 0021_MW021, 0021_MW111, AEC A, 0021_MW024, 0021_MW060, 0021_MW070, 0021_MW072, AEC B, 0021_MW110, 0021_MW071, 0021_MW113, 0021_MW112, 0021_MW022, 0021_MW115
0021_MW108, 0021_MW107, 0021_MW102, 0021_MW065, 0021_MW062, 0021_MW109, 0021_MW061, 0021_MW064, 0021_MW153, 0021_MW154, 0021_MW155, 0021_MW105, 0021_MW103, 0021_MW106, 0021_MW150, 0021_MW152, 0021_MW151, 0021_MW063, 0021_MW101, 0021_MW104
0021_MW133, 0021_MW132, 0021_MW131

Paper Size ISO A3
0 200 400 600 800 1000
Metres
Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

N

GHD

Department of Defence
Sampling Event Factual Report - April 2025
HMAS Creswell (0020) and Jervis Bay Range Facility (0021)
PFAS Ongoing Monitoring Program (OMP)

Groundwater analytical results

Project No. **12626622**
Revision No. **0**
Date **8/05/2025**

FIGURE 9

\\ghdnet\ghd\AU\Sydney\Projects\21\12626622\GIS\Maps\Deliverables\12626622_JBRF_Creswell_SEFR_Apr2025.aprx
Print date: 08 May 2025 - 14:44

Data source: Imagery: Nearmap WMS Server: . Created by: tnham

Legend

- JBRF Site Boundary (0021)
- HMAS Creswell Site Boundary (0020)
- Main Water Catchments
- Indicative Monitoring Area (digitised from AECOM SEFR, Oct 2023)
- Areas of Environmental Concern (AEC) - Northern Catchment
- Areas of Environmental Concern (AEC) - Southern Catchment
- Roads
- Major Waterways
- Estimated Drainage Lines (Approx.)
- Interpolated Flow Paths
- Water Bodies
- Drainage Areas

Surface water sample analytical results

- New Exceedence of Human Health and/or Ecological Screening Criteria for PFOS, PFOS+PFHxS, and/or PFOA
- Sampled, no first time detection or exceedance
- Not accessed/sampled

LAKE WINDERMERE CATCHMENT
LAKE WINDERMERE
LAKE MCKENZIE
LAKE MCKENZIE CATCHMENT
BHERWERRE BARRIER CATCHMENT
FLAT ROCK CREEK CATCHMENT
FLAT ROCK CREEK
CAPTAINS LAGOON
CAPTAINS LAGOON CATCHMENT
JERVIS BAY ROAD
TELEGRAPH CREEK
TELEGRAPH CREEK CATCHMENT
MARY CREEK
MARY CREEK CATCHMENT
RYANS SWAMP
WRECK BAY ROAD
SUMMERCLOUD CREEK
SUMMERCLOUD CREEK CATCHMENT
BLACKS WATERHOLE

AEC A, AEC B, AEC C, AEC D, AEC E, AEC F, AEC G, AEC H

0021_SW038, 0021_SW036, 0021_SW040, 0021_SW037, 0021_SW032, 0021_SW034, 0021_SW035, 0021_SW080, 0021_SW079, 0021_SW078, 0021_SW077, 0021_SW076, 0021_SW212, 0021_SW083, 0021_SW048, 0021_SW045, 0021_SW053, 0021_SW044, 0021_SW043, 0021_SW051, 0021_SW052, 0021_SW211, 0021_SW188, 0021_SW056, 0021_SW085, 0021_SW057, 0021_SW058, 0021_SW059, 0021_SW018, 0021_SW019, 0021_SW126, 0021_SW020, 0021_SW021, 0021_SW013, 0021_SW027, 0021_SW022, 0021_SW024, 0021_SW025, 0021_SW062, 0021_SW064, 0021_SW068, 0021_SW069, 0021_SW060

0020_SW029, 0020_SW033, 0020_SW026, 0020_SW027, 0020_SW054, 0020_SW012, 0020_SW004, 0020_SW018, 0020_SW016, 0020_SW005, 0020_SW030, 0020_SW032, 0020_SW010, 0020_SW011, 0020_SW037, 0020_SW036, 0020_SW035, 0020_SW057, 0020_SW023, 0020_SW022

0021_OTH001, 0021_SW001, 0021_OTH003, 0021_OTH006, 0021_SW112, 0021_SW110, 0021_SW111, 0021_SW130, 0021_OTH005, 0021_SW002, 0021_OTH004, 0021_OTH002, 0021_SW003, 0021_SW017, 0021_SW012, 0021_SW153, 0021_SW127, 0021_SW016, 0021_SW005, 0021_SW004, 0021_SW006, 0021_SW010, 0021_SW011

Paper Size ISO A3

0 200 400 600 800 1000

Metres

N

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

GHD

Department of Defence
Sampling Event Factual Report - April 2025
HMAS Creswell (0020) and Jervis Bay Range Facility (0021)
PFAS Ongoing Monitoring Program (OMP)

Surface water and tank analytical results

Project No. **12626622**
Revision No. **0**
Date **8/05/2025**

FIGURE 10

\\ghdnet\ghd\AU\Sydney\Projects\21\12626622\GIS\Maps\Deliverables\12626622_JBRF_Creswell_SEFR_Apr2025.aprx
Print date: 08 May 2025 - 15:46

Data source: Imagery: Nearmap WMS Server: . Created by: tnham

Legend

- JBRF Site Boundary (0021)
- HMAS Creswell Site Boundary (0020)
- Main Water Catchments
- Indicative Monitoring Area (digitised from AECOM SEFR, Oct 2023)
- Areas of Environmental Concern (AEC) - Northern Catchment
- Areas of Environmental Concern (AEC) - Southern Catchment
- Roads
- Major Waterways
- Estimated Drainage Lines (Approx.)
- Interpolated Flow Paths
- Water Bodies
- Drainage Areas

Sediment sample analytical results

- New Exceedence of Human Health and/or Ecological Screening Criteria for PFOS, PFOS+PFHxS, and/or PFOA
- Not accessed/sampled
- Sampled, no first time detection or exceedance

FLAT ROCK CREEK
FLAT ROCK CREEK CATCHMENT
LAKE WINDERMERE CATCHMENT
LAKE WINDERMERE
LAKE MCKENZIE CATCHMENT
LAKE MCKENZIE
BHERWERRE BARRIER CATCHMENT
JERVIS BAY ROAD
CAPTAINS LAGOON
CAPTAINS LAGOON CATCHMENT
TELEGRAPH CREEK CATCHMENT
TELEGRAPH CREEK
AEC A
AEC B
AEC C
AEC D
AEC E
AEC F
AEC G
AEC H
MARY CREEK
MARY CREEK CATCHMENT
WRECK BAY ROAD
SUMMERCLOUD CREEK
SUMMERCLOUD CREEK CATCHMENT
BLACKS WATERHOLE
YANS SWAMP

0020_SD001, 0020_SD002, 0020_SD004, 0020_SD006, 0020_SD007, 0020_SD018, 0020_SD019, 0020_SD024, 0020_SD025, 0020_SD026, 0020_SD028, 0020_SD032, 0020_SD033
0021_SD001, 0021_SD002, 0021_SD003, 0021_SD004, 0021_SD005, 0021_SD006, 0021_SD007, 0021_SD009, 0021_SD011, 0021_SD012, 0021_SD013, 0021_SD014, 0021_SD015, 0021_SD016, 0021_SD017, 0021_SD018, 0021_SD020, 0021_SD021, 0021_SD023, 0021_SD028, 0021_SD029, 0021_SD030, 0021_SD031, 0021_SD032, 0021_SD036, 0021_SD037, 0021_SD040, 0021_SD043, 0021_SD044, 0021_SD046, 0021_SD047, 0021_SD048, 0021_SD049, 0021_SD050, 0021_SD052, 0021_SD054, 0021_SD058, 0021_SD059, 0021_SD066, 0021_SD067, 0021_SD068, 0021_SD069, 0021_SD070, 0021_SD073, 0021_SD075, 0021_SD080, 0021_SD093, 0021_SD110, 0021_SD111, 0021_SD188

Paper Size ISO A3

0 200 400 600 800 1000

Metres

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

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GHD

Department of Defence
Sampling Event Factual Report - April 2025
HMAS Creswell (0020) and Jervis Bay Range Facility (0021)
PFAS Ongoing Monitoring Program (OMP)

Sediment analytical results

Project No. **12626622**
Revision No. **0**
Date **8/05/2025**

FIGURE 11

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Print date: 08 May 2025 - 15:56

Data source: Imagery: Nearmap WMS Server: . Created by: tnham

Appendix B

Results tables

					Field Parameters						
					pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field)	DO (%S) (Field)	Redox (Field)	Temperature (Field)	TDS (Field)
					pH units	µS/cm	mg/L	%S	mV	°C	mg/L
EQL					0.01	0.1	0.01	0.01	0.01	0.1	0.01
Catchment	**SPR Type**	**Location**	**Date**	**Sample Description**							
Bherwerre Barrier	Receptor	0021_SW083	04 Apr 2025	Clear, brown tinge, no odour, no sheen, no sediment	6.79	625	3.86	42.7	-32.9	20.2	-
Bherwerre Barrier	Receptor	0021_SW212	04 Apr 2025	Clear, brown tinge, no odour, no sheen, no sediment	6.05	818	7.03	80.5	-20.7	21.9	-
Captains Lagoon	Source	0021_SW001	03 Apr 2025	Clear, no odour or sheen.	5.52	400	3.7	45.4	0.7	25.6	257.4
Captains Lagoon	Source	0021_SW027	01 Apr 2025	Clear, low turbidity, no sheen, no odour, some organic solids within water	5.41	255.7	2.84	-	28.6	18.6	189.8
Captains Lagoon	Pathway	0020_SW011	02 Apr 2025	Clear, no odour or sheen	5.18	212.1	6.18	64.2	162.3	17.1	162.5
Captains Lagoon	Pathway	0020_SW057	31 Mar 2025	Clear, low turbidity, no sheen, no odour	5.92	181.6	7.1	-	105.5	19.4	1,323
Captains Lagoon	Pathway	0021_SW013	01 Apr 2025	Colourless, no odour, no sheen, low turbidity	5.29	376.8	-	69.2	131.8	18.4	280.15
Captains Lagoon	Pathway	0021_SW019	03 Apr 2025	Clear, no odour or sheen.	6.11	391.1	5.47	63	44.3	22.2	268.45
Captains Lagoon	Pathway	0021_SW021	02 Apr 2025	Clear, low turbidity, no odour, no sheen	5.73	369.3	5.14	-	193.2	16.5	288.5
Captains Lagoon	Pathway	0021_SW126	03 Apr 2025	Clear, no odour or sheen.	6.59	421	4.17	41.8	16.2	16.4	327
Captains Lagoon	Receptor	0020_SW004	31 Mar 2025	Brown colour, high turbidity, no odour or sheen	7.94	40,590	7.57	-	27.1	20.4	28,923
Captains Lagoon	Receptor	0020_SW005	31 Mar 2025	Brown colour, high turbidity, no odour or sheen	7.94	40,238	7.5	-	29.3	20.4	28,690
Captains Lagoon	Receptor	0020_SW010	31 Mar 2025	Light brown, turbid, no sheen, no odour, some foam on surface	7.9	40,165	6.67	-	76.5	20	27,155
Captains Lagoon	Receptor	0020_SW012	31 Mar 2025	Brown colour, high turbidity, no odour, no sheen	7.98	42,121	7.9	-	57.2	20.4	30,020
Clay Pools	Receptor	0021_SW076	02 Apr 2025	Light brown, no odour, no sheen, low turbidity	5.6	222	1.08	11.3	14.6	16.7	172.3
Clay Pools	Receptor	0021_SW078	02 Apr 2025	Pale brown, low turbidity, no odour, no sheen	5.83	221.6	4.17	40.2	135.1	17.1	169.8
Clay Pools	Receptor	0021_SW079	02 Apr 2025	Pale brown, low turbidity, no odour, no sheen	5.86	223.4	3.94	40.7	142.7	16.4	170.95
Clay Pools	Receptor	0021_SW080	02 Apr 2025	Pale brown, low turbidity, no odour, no sheen	6.01	142.1	5.27	55.1	143.5	17.5	107.9
Flatrock Creek	Source	0020_SW016	31 Mar 2025	Pale-yellow tinge, clear, no odour, no sheen	7.01	372.3	6.98	68.8	67.8	22.2	255.45
Flatrock Creek	Source	0020_SW018	31 Mar 2025	Pale yellow tinge, clear, no odour, no sheen	6.93	368.3	5.16	59.1	71.6	22	253.5
Flatrock Creek	Pathway	0020_SW022	31 Mar 2025	Slight pale yellow, no odour or sheen	6.55	195	6.28	37.5	190.2	18.9	139.8
Flatrock Creek	Pathway	0020_SW023	31 Mar 2025	Pale yellow, clear, no odour, no sheen	6.59	156.6	8.23	87.3	186	19	115.7
Flatrock Creek	Pathway	0020_SW030	31 Mar 2025	Pale yellow tinge, clear, no odour, no sheen	4.24	171.6	7.82	83.8	193.9	19.1	125.45
Flatrock Creek	Pathway	0020_SW032	31 Mar 2025	Pale yellow tinge, no odour, no sheen, foam buildup on surface	3.8	197.5	9.26	101	192.8	19.5	143.65
Flatrock Creek	Pathway	0021_SW020	02 Apr 2025	Clear, slight yellow tinge, no odour or sheen	5.37	196.8	5.82	61.9	171.9	18.2	14,701
Flatrock Creek	Pathway	0021_SW022	03 Apr 2025	Clear, no odour or sheen	5.37	201.6	2.64	30.5	91.4	21.9	139.1
Flatrock Creek	Pathway	0021_SW024	03 Apr 2025	Clear, orange tinge, organic odour	5.06	199.9	4.97	58.1	111.3	24.03	121.95
Flatrock Creek	Pathway	0021_SW025	04 Apr 2025	Yellow tinge, clear, slight organic odour, no sheen	4.42	249	3.41	35.1	173.1	18	186.5
Flatrock Creek	Receptor	0020_SW026	01 Apr 2025	Very pale yellow tinge, clear, very slight organic odour, no sheen	7.45	29,438	5.62	66.8	-38.2	18.8	21,619
Flatrock Creek	Receptor	0020_SW027	01 Apr 2025	clear, yellow tinge, no odour, no sheen	5.06	1,138	4.52	47.6	134.9	17.9	858
Flatrock Creek	Receptor	0020_SW029	31 Mar 2025	Pale yellow tinge, clear, slight rotten egg odour, no sheen	4.87	1,842	4.37	46.9	104.7	19	1,358.5
Flatrock Creek	Receptor	0020_SW033	01 Apr 2025	Clear, no odour, no sheen	7.98	45,619	4.2	55.7	-28.5	19.8	33,098
Lakes	Pathway	0021_SW035	03 Apr 2025	No odour, no sheen, no turbidity, tannin stain	6.16	479.7	5.37	55.3	190.6	16.7	-
Lakes	Receptor	0021_SW032	04 Apr 2025	Pale yellow, clear, slight organic odour, no sheen.	5.84	229	7.74	87	21.5	22.2	157.3
Lakes	Receptor	0021_SW034	04 Apr 2025	Pale yellow, clear, slight organic odour, no sheen.	5.94	227.1	6.66	74.2	31.9	22.1	156
Lakes	Receptor	0021_SW036	04 Apr 2025	Clear, brown tinge, no odour, no sheen, no sediment	5.63	218.2	3.16	36.9	74.3	22.2	-
Lakes	Receptor	0021_SW037	07 Apr 2025	Pale yellow tinge, clear, no odour, no sheen, tannin colour in water, foam/bubbles on bank	5.84	85.6	5.55	61.7	137.6	20.4	61.1
Lakes	Receptor	0021_SW040	04 Apr 2025	Clear, brown tinge, no odour, no sheen, no sediment	5.87	196.1	3.18	36.7	30	22.3	-
Mary Creek	Source	0021_SW003	03 Apr 2025	Pale brown, moderate turbidity, no odour or sheen	3.07	293.8	5.83	68.8	185.4	25.7	179
Mary Creek	Source	0021_SW004	02 Apr 2025	Clear, low turbidity, no odour, no sheen	4.2	193.8	-	5.04	239.7	15	156
Mary Creek	Source	0021_SW005	02 Apr 2025	Clear, no odour or sheen	3.99	272.8	5.09	52.4	226.5	17.3	208
Mary Creek	Source	0021_SW006	02 Apr 2025	Clear, no odour or sheen	4.02	199.2	7.91	81.7	218.9	16.9	152.8
Mary Creek	Source	0021_SW110	03 Apr 2025	Pale yellow, no odour or sheen.	7.29	291.4	6.51	71.3	40.5	20.2	208.65
Mary Creek	Source	0021_SW112	03 Apr 2025	Pale yellow, no odour or sheen.	7.07	299	4.55	53.1	13.8	22.6	202.15
Mary Creek	Source	0021_SW127	01 Apr 2025	Slight tannin stain, no odour, no sheen, some foaming	6.11	373.5	6.87	-	73.1	19.8	271.7
Mary Creek	Source	0021_SW130	03 Apr 2025	Clear, no odour or sheen.	6.52	223.7	3.83	43.8	50.2	22.5	158.4
Mary Creek	Source	0021_SW153	31 Mar 2025	Low turbidity colour brown, some foaming, no odour or sheen	8.24	138.8	8.26	-	16.3	19.8	99.8

					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 Type**	**Location**	**Date**	**Sample Description**							
Mary Creek	Pathway	0021_SW010	04 Apr 2025	Pale yellow-brown, clear, no odour, no sheen	5.15	208.4	1.86	18.9	44.6	17.3	16
Mary Creek	Pathway	0021_SW018	02 Apr 2025	Clear, low turbidity, no odour, no sheen	5.91	509	-	5.25	193.9	15.3	403
Mary Creek	Pathway	0021_SW044	01 Apr 2025	Slight tanin stain, no turbidity, no odour, no sheen, foam present on water surface	4.86	208	8.7	-	101	18.6	154
Mary Creek	Pathway	0021_SW045	01 Apr 2025	Dark tanin, low turbidity, no odour, no sheen, no foam	4.74	277	7.02	-	84.8	18.3	206.5
Mary Creek	Pathway	0021_SW048	03 Apr 2025	Pale brown tinge, clear, no odour, no sheen	5.72	404	4.61	48	57	17	304.2
Mary Creek	Pathway	0021_SW053	01 Apr 2025	Low turbidity, tanin staining, no odour, no sheen, foam observed downstream of culvert	4.91	167.1	7.2	-	73.8	18.4	124.3
Mary Creek	Receptor	0021_SW012	31 Mar 2025	Low turbidity, colour brown, some foaming, no odour or sheen	6	135.9	7.4	-	-34.5	19.6	100.2
Mary Creek	Receptor	0021_SW043	01 Apr 2025	Dark tanin, low turbidity, no odour, no sheen, no foam	5.74	308.4	5.58	-	17.5	19.1	225.9
Mary Creek	Receptor	0021_SW051	03 Apr 2025	Clear, moderate turbidity, no sheen no odour,	8.11	44,966	5.11	82.4	144.3	20.6	1,250
Mary Creek	Receptor	0021_SW052	01 Apr 2025	Very slight tanin staining in water mixed with ocean water, no odour, no sheen	6.67	2,591	6.98	-	111	19.9	1,864
Mary Creek	Receptor	0021_SW211	03 Apr 2025	Salt water, no odour, no sheen, no turbidity	8.14	86,278	-	105.6	131.3	20.9	-
RAN SSSS	Tank	0021_OTH001	07 Apr 2025	Clear, distinct chlorine odour, no sheen	7.18	251.7	6.53	75	669.1	21.7	174.2
RAN SSSS	Tank	0021_OTH002	07 Apr 2025	Clear, no odour, no sheen	7	890	7.01	78.2	321.8	20.5	630.5
RAN SSSS	Tank	0021_OTH003	07 Apr 2025	Clear, no odour, no sheen	7.14	271.3	4.7	55.1	443.4	23.5	181.35
RAN SSSS	Tank	0021_OTH005	07 Apr 2025	Clear, no odour, no sheen	9	91.4	5.22	60.1	393.6	21.8	63
RAN SSSS	Tank	0021_OTH006	07 Apr 2025	Clear, no odour, no sheen	2.73	1,574	7.15	79.4	778.5	20.6	1,118.5
STP	STP	0020_SW035	31 Mar 2025	Brown, turbid, sewerage odour, no sheen,	6.8	273.1	3.73	-	44	20.7	193
STP	STP	0020_SW036	31 Mar 2025	Brown, turbid, slight sewerage odour, no sheen, some flocculation	5.92	244.5	2.81	-	6.2	20.7	173.7
STP	STP	0020_SW037	31 Mar 2025	Clear, low turbidity, no sheen, chlorine odour	5.89	3,164	5.59	-	336.6	21.2	221.7
Summercloud Creek	Pathway	0021_SW057	01 Apr 2025	Pale yellow, clear, no odour or sheen.	4.34	509	7.09	73.4	237.9	17	390
Summercloud Creek	Pathway	0021_SW058	01 Apr 2025	Pale yellow, clear, no odour or sheen, foam on surface	3.98	205.4	7.38	78.1	232.2	17.4	156
Summercloud Creek	Pathway	0021_SW059	04 Apr 2025	Pale yellow, clear, slight organic odour, no sheen.	3.03	247.1	3.7	43.5	190.3	23.2	167.05
Summercloud Creek	Receptor	0021_SW056	01 Apr 2025	Yellow, clear, no odour or sheen	5.73	4,064	3.79	41.4	128	18.9	2,990
Summercloud Creek	Receptor	0021_SW085	01 Apr 2025	Suspended sand in waves causing slight turbidity, no odour, no sheen	7.99	46,588	6.55	-	15.7	20	33,489
Summercloud Creek	Receptor	0021_SW188	03 Apr 2025	Tinge of brown, very light, no turbidity, no odour, no sheen	8.45	34,453	3.66	-	147.7	15.5	2,345
Telegraph Creek	Pathway	0021_SW062	02 Apr 2025	Pale brown, clear, no odour or sheen	4.32	177.6	8	83.3	137.8	17.3	134.2
Telegraph Creek	Pathway	0021_SW064	02 Apr 2025	No turbidity, tannin staining, odourless, no sheen	4.16	183.6	3.75	38.1	211.74	17.2	140.4
Telegraph Creek	Receptor	0021_SW060	01 Apr 2025	Dark tanin, low turbidity, no odour, no sheen, visible foam (organic and non natural)	5.65	1,687	5.62	-	-95.6	18.9	1,413
Telegraph Creek	Receptor	0021_SW068	01 Apr 2025	Very dark tanin colour, low turbidity, leaf litter, no sheen, no odour, small amount of foam	4.82	497	4.88	-	-25.6	18.8	4.87
Telegraph Creek	Receptor	0021_SW069	01 Apr 2025	Tanin stained, no turbidity	6.9	14,993	5.15	-	-2.8	17.8	11,307

Statistics

Number of Results	85	85	81	62	85	85	71
Number of Detects	85	85	81	62	85	85	71
Minimum Concentration	2.73	85.6	1.08	5.04	-95.6	15	4.87
Maximum Concentration	9	86,278	9.26	105.6	778.5	26.6	33,489
Average Concentration *	5.9	6,277	5.4	56	126	20	3,571
Geometric Average *	5.8	634	5	49		20	401
Median Concentration *	5.86	277	5.27	55.5	111.3	19.8	202.15
Standard Deviation *	1.3	15,584	1.9	23	135	2.4	8,824
Geometric Standard Deviation *	1.3	6.2	1.5	1.8		1.1	6.4
95% UCL (Student's-t) *	6.174	9,089	5.734	60.46	150.2	20.2	5,317
% of Detects	100	100	100	100	100	100	100
% of Non-Detects	0	0	0	0	0	0	0

						Field data		Field Parameters				
						Total Well Depth	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field)	Redox (Field)	Temperature (Field)
						m bTOC	m bTOC	pH units	µS/cm	mg/L	mV	°C
EQL						0.05	0.05	0.01	0.1	0.01	0.01	0.1
Catchment	**SPR Type**	**Location**	**Date**	**Sample method**	**Sample Description**							
Bherwerre Barrier	Receptor	0021_MW114	04 Apr 2025	Low flow/micropurge	Milky brown, medium turbidity, no odour, no sheen, no sediment	7.668	1.161	6.65	605	0.27	204.8	19.5
Captains Lagoon	Source	0020_MW052	31 Mar 2025	Low flow/peri pump	Pale yellow tinge, mostly cloudy, no odour, no sheen, no sediment	1.814	0.035	5.72	115.1	6	100.7	20.9
Captains Lagoon	Source	0021_MW028	02 Apr 2025	Low flow/micropurge	Clear, non-turbid, trace fine organic matter, no odour, no sheen.	6.92	1.07	6.44	1,306	4.42	205.6	21.4
Captains Lagoon	Source	0021_MW030	03 Apr 2025	Low flow/peri pump	Pale yellow tinge, clear, no odour, no sheen, no sediment	10.684	0.972	6.48	1,893	0.14	-42	18.1
Captains Lagoon	Source	0021_MW062	24 Apr 2025	Low flow/peri pump	Clear, non-turbid, hydrocarbon sheem, distinct hydrocarbon odour, no sediment	2.95	0.63	6.73	797	3.04	-169.3	20.5
Captains Lagoon	Source	0021_MW102	04 Apr 2025	No purge/peri pump	Cloudy yellow white, opaque, no odour or sheen, no sediment	1.79	1.535	6.21	718	1.24	-95	23.6
Captains Lagoon	Source	0021_MW109	03 Apr 2025	Low flow/peri pump	Pale brown, clear, organic odour, no sheen.	3.96	0.295	4.99	228.5	1.15	-32.4	21.4
Captains Lagoon	Source	0021_MW119	02 Apr 2025	Low flow/peri pump	Cloudy white, opaque, no odour or sheen	1.91	0.22	6.33	287.4	4.73	45	22.3
Captains Lagoon	Source	0021_MW120	02 Apr 2025	Low flow/peri pump	Cloudy white, no odour or sheen, low water level	2.905	0.365	5.59	1,000	0.19	0.5	21.3
Captains Lagoon	Source	0021_MW121	02 Apr 2025	Low flow/peri pump	Cloudy yellow grey, no odour or sheen	2.63	0.31	5.9	245.2	0.07	-93.9	21.3
Captains Lagoon	Source	0021_MW123	02 Apr 2025	Purge/bailer	Cloudy, pale brown, grey, no odour, no sheen	2.82	0.53	5.92	328.8	2.44	200.1	22.2
Captains Lagoon	Source	0021_MW127	02 Apr 2025	Low flow/peri pump	Clear, no odour, no sheen, no sediment	6.686	1.412	4.17	685	0.27	56	21.3
Captains Lagoon	Pathway	0020_MW012A	08 Apr 2025	Bailer	Pale yellow, clear, slight hydrogen sulphide odour, no sheen.	6.25	2.455	4.99	195	1.71	-31.9	17.4
Captains Lagoon	Pathway	0020_MW057	31 Mar 2025	Low flow/peri pump	Pale brown, mostly clear, no odour or sheen. Good recharge, stable SWL	4.575	3.07	5.58	234.6	5.53	193.3	19.3
Captains Lagoon	Pathway	0020_MW058	03 Apr 2025	Low flow/peri pump	Clear, no odour or sheen. Good recharge.	5.878	4.24	4.82	194.1	1.5	162	18.4
Captains Lagoon	Pathway	0020_MW059	31 Mar 2025	Low flow/peri pump	Pale brown, mostly clear, no odour or sheen, ok recharge.	3.79	1.905	4.62	249.3	5.38	266.7	19.8
Captains Lagoon	Pathway	0020_MW070	24 Apr 2025	Bailer	Pale brown, turbid, slight decaying organic odour, no sheen, no sediment	11.85	4.75	6.11	302.9	1.66	3	20.5
Captains Lagoon	Pathway	0020_MW071	24 Apr 2025	Bailer	Pink orange colour, turbid, trace suspended solids, no odour, no sheen	11.75	7.09	6.21	231.5	1.73	-24.5	20.8
Captains Lagoon	Pathway	0020_MW102D	31 Mar 2025	Low flow/peri pump	Clear, slight rotten egg odour, no sheen, no sediment	9.598	2.303	5.67	362.6	0.14	-25.6	19.2
Captains Lagoon	Pathway	0020_MW102S	31 Mar 2025	Low flow/peri pump	Yellow tinge, no odour or sheen.	2.82	0.93	5.76	388.7	1.5	35	20.3
Captains Lagoon	Pathway	0020_MW104	03 Apr 2025	Low flow/peri pump	Clear, no odour or sheen. Poor recharge.	10.19	5.02	4.1	271.7	1.23	362.5	17.9
Captains Lagoon	Pathway	0021_MW018	02 Apr 2025	Low flow/peri pump	Clear, no odour, no sheen, no sediment, great recharge	8.819	2.071	4.18	282	0.16	117.7	19.9
Captains Lagoon	Pathway	0021_MW108	04 Apr 2025	Low flow/peri pump	Pale yellow, clear, no odour or sheen.	3.2	1.155	5.69	168.6	2.72	27.1	19.7
Captains Lagoon	Pathway	0021_MW124	03 Apr 2025	Low flow/peri pump	Clear, slight rotten egg odour, no sheen, no sediment	3.118	0.818	5.22	217.2	0.27	-27.1	18.8
Captains Lagoon	Pathway	0021_MW134	08 Apr 2025	Bailer	Pale brown, turbid, some sediment, no sheen, no odour	7.74	5.34	4.01	258.3	1.25	202.9	19.8
Clay Pools	Receptor	0021_MW020	02 Apr 2025	Low flow/peri pump	Clear, no odour, no sheen, no sediment, moderate to good recharge	8.677	1.92	5.25	426	2.44	199	18.2
Flatrock Creek	Source	0020_MW037	31 Mar 2025	Low flow/peri pump	Pale brown, slightly cloudy, no odour or sheen, ok recharge.	6.95	4.59	3.9	325.9	1.3	291.1	18.3
Flatrock Creek	Source	0020_MW112	31 Mar 2025	Low flow/peri pump	Pale yellow, mostly clear slight brown sediment load, no odour or sheen	3.86	1.05	5.42	248.3	3.23	212.3	20.2
Flatrock Creek	Source	0020_MW115	31 Mar 2025	Low flow/peri pump	Pale brown, clear, no odour or sheen, good recharge. Stable SWL	3.74	0.18	6.36	310.1	0.16	43.5	18.2
Flatrock Creek	Source	0021_MW025	02 Apr 2025	Low flow/peri pump	Clear, no sediment, hydrogen sulfide odour, no sheen, recharge stable	5.78	2.35	4.64	159.7	1.29	-62.4	21.5
Flatrock Creek	Source	0021_MW026	07 Apr 2025	Bailer	Brown, cloudy, slight decaying organic odour, no sheen, high sediment load, dark brown, slight foam on water surface within bailer	8.61	2.515	5.32	857	4.2	57.3	18.7
Flatrock Creek	Source	0021_MW117	02 Apr 2025	Low flow/peri pump	Pale yellow tinge, clear, no odour, no sheen, no sediment, good recharge	1.902	0.085	6.29	713	1.01	-10.3	21.9
Flatrock Creek	Source	0021_MW118	02 Apr 2025	Low flow/peri pump	Clear, no odour, no sheen, no sediment	2.901	0.436	6.71	604	0.33	-50.4	21.4
Flatrock Creek	Pathway	0020_MW001	07 Apr 2025	Low flow/peri pump	Pale grey, moderate turbidity, no odour or sheen. Good recharge.	5.48	2.295	5.8	284.2	2.05	43.1	22.4
Flatrock Creek	Pathway	0020_MW007	07 Apr 2025	Low flow/peri pump	Clear, no odour or sheen, no sediment.	3.18	2.01	7.11	686	0.01	9.3	24
Flatrock Creek	Pathway	0020_MW017	31 Mar 2025	Low flow/peri pump	Bright-yellow tinge, clear, slight rotten egg odour, no sheen, no sediment	4.901	0.909	5.12	199.1	0.07	-119.4	20
Flatrock Creek	Pathway	0020_MW068	01 Apr 2025	Low flow/peri pump	Clear, no odour, no sheen, no sediment	8.346	6.217	5.25	419.7	2.2	63.1	18.9
Flatrock Creek	Pathway	0020_MW069	24 Apr 2025	Bailer	Dark brown colour, suspended solids/silt, no odour, no sheen	2.26	1.13	5.3	101.9	2.55	149	20.5
Flatrock Creek	Pathway	0020_MW109	31 Mar 2025	Low flow/peri pump	Cloudy yellow white, opaque, egg odour, no sheen	2.745	1.03	4.86	295.6	0.31	-153	20.6
Flatrock Creek	Pathway	0020_MW110	31 Mar 2025	Low flow/peri pump	Cloudy, yellow orange, opaque, slight egg odour	3.03	1.01	5.67	368.3	0.69	-135.9	20.2
Flatrock Creek	Pathway	0020_MW111	03 Apr 2025	Low flow/peri pump	Slightly cloudy, no odour or sheen, no sediment	2.665	1.165	5.15	179	2.35	22.3	20.5
Flatrock Creek	Pathway	0021_MW125	02 Apr 2025	Low flow/peri pump	Clear, slight rotten egg odour, no sheen, slight brown sediment	3.686	1.279	5.67	222.2	1.65	-6.4	20.5
Flatrock Creek	Pathway	0021_MW126	01 Apr 2025	Low flow/low flow	Clear, non-turbid, no sheen, no odour, no sediment	9.745	1.09	6.06	845.1	1.44	-184.2	18.9
Flatrock Creek	Pathway	0021_MW128	02 Apr 2025	Low flow/peri pump	Clear, no odour, no sheen, no sediment	5.999	2.121	4.19	891	0.12	96.6	21.5
Flatrock Creek	Pathway	0021_MW160	02 Apr 2025	Low flow/peri pump	Pale yellow tinge, clear, no odour, no sheen, no sediment, great recharge	6.881	2.586	4.28	359	0.1	119.2	21.4
Flatrock Creek	Pathway	0021_MW163	02 Apr 2025	Low flow/peri pump	Clear, no odour, no sheen, no sediment	3.646	1.801	4.32	393.3	4.83	169.9	20.5
Flatrock Creek	Pathway	0021_MW164	02 Apr 2025	Low flow/peri pump	Clear, slight yellow tinge, slight hydrogen sulfide odour, no sheen	2.32	0.26	5.49	515	0.01	-115.8	21.8
Lakes	Pathway	0021_MW129	04 Apr 2025	Low flow/micropurge	Clear, no colour, no sediment, no odour	31.515	19.324	5.89	536	0.28	-142.6	18.1
Lakes	Pathway	0021_MW130	04 Apr 2025	Low flow/micropurge	Low turbidity, pale brown colour, organics odour, no sediment, no sheen	36.145	7.724	6.32	551	0.21	-200	19.2
Lakes	Pathway	0021_MW135	04 Apr 2025	Low flow/micropurge	Cloudy, orange, opaque, no sheen	40.9	12.28	5.28	272.1	0.93	67	17.7
Lakes	Pathway	0021_MW136	04 Apr 2025	Low flow/peri pump	Cloudy, slightly opaque, no odour or sheen, no sediment, slowed pump	26.66	6.37	4.94	228.1	0.01	-82.9	18.2
Lakes	Pathway	0021_MW137	04 Apr 2025	Low flow/peri pump	Clear, no sediment or sheen, hydrogen sulfide odour, good recharge.	11.625	5.6	4.27	701	0.57	3.5	18.4
Lakes	Pathway	0021_MW138	03 Apr 2025	Low flow/micropurge	Clear, low turbidity, trace white sediment, sulfur odour.	41.155	6.875	5.96	1,295	0.29	-108.7	18.4

						Field data		Field Parameters				
						Total Well Depth	Standing Water Level	pH (Field)	Electrical conductivity (field)	Dissolved Oxygen (Field)	Redox (Field)	Temperature (Field)
						m bTOC	m bTOC	pH units	µS/cm	mg/L	mV	°C
EQL						0.05	0.05	0.01	0.1	0.01	0.01	0.1
Catchment	**SPR Type**	**Location**	**Date**	**Sample method**	**Sample Description**							
Lakes	Pathway	0021_MW139	03 Apr 2025	Low flow/micropurge	Clear, low turbidity, no sediment, no odour.	21.15	5.775	5.73	578	0.2	-130.1	18
Lakes	Pathway	0021_MW140	03 Apr 2025	Low flow/micropurge	Clear, low turbidity, no sediment, no odour.	12.625	2.565	5.14	512	0.13	37.7	18.6
Mary Creek	Source	0021_MW024	01 Apr 2025	Low flow/peri pump	Colourless, very slightly cloudy, no odour, no sheen, no sediment	9.851	2.442	4.01	491.4	0.14	229.5	20.5
Mary Creek	Source	0021_MW061	24 Apr 2025	Low flow/peri pump	Clear, low turbidity, distinct H2S odour, distinct hydrocarbon odour and some sheen	2.57	0.49	6.61	209.5	0.68	-162.1	23
Mary Creek	Source	0021_MW063	03 Apr 2025	Low flow/peri pump	Cloudy white, opaque, no odour or sheen, no sediment	6.04	1.055	4.02	331.7	0.01	37.5	23.9
Mary Creek	Source	0021_MW064	03 Apr 2025	Low flow/peri pump	Yellow tinge, clear, no odour, no sheen, no sediment, good recharge	6.032	1.119	5.56	296.5	1.7	-21.7	20.6
Mary Creek	Source	0021_MW065	03 Apr 2025	Low flow/peri pump	Yellow tinge, clear, moderate rotten egg odour, no sheen, slight brown sediment	6.034	1.493	6.3	993	0.05	-151.8	20.9
Mary Creek	Source	0021_MW101	04 Apr 2025	Low flow/peri pump	Very slightly cloudy, very slight yellow tinge, no odour or sheen, no sediment	1.99	0.575	6.52	305.2	6.46	84.3	21.3
Mary Creek	Source	0021_MW103	03 Apr 2025	Low flow/peri pump	Clear, no odour, no sheen, no sediment, great recharge	2.782	0.731	5.64	398.3	1.13	88.2	22.2
Mary Creek	Source	0021_MW104	03 Apr 2025	Low flow/peri pump	Cloudy, pale yellow, no odiur or sheen	2.75	1.06	4.49	177.9	4.46	79.6	20
Mary Creek	Source	0021_MW105	03 Apr 2025	Low flow/peri pump	Cloudy, opaque, pale orange, no odour or sheen, trace fine dark suspended sediment	2.91	0.9	5.08	310.9	1.42	2.7	22.8
Mary Creek	Source	0021_MW106	04 Apr 2025	Low flow/peri pump	Pale orange grey, opaque, no odour or sheen, fine dark grey suspended sediment	2.365	0.86	6.32	359.6	4.37	-83.7	21.5
Mary Creek	Source	0021_MW107	03 Apr 2025	Low flow/peri pump	Clear, no odour, no sheen, no sediment	4.706	0.821	6.28	655	0.14	46.2	21.5
Mary Creek	Source	0021_MW110	01 Apr 2025	Low flow/peri pump	Pale yellow tinge, clear, slight rotten egg odour, no sheen, no sediment	2.771	1.117	5.03	274.9	0.15	-25.8	21.2
Mary Creek	Source	0021_MW111	08 Apr 2025	Bailer	Pale yellow tinge, clear, slight rotten egg odour, no sheen, no sediment	2.421	0.941	5.1	88.8	1.51	28.1	21.3
Mary Creek	Source	0021_MW150	04 Apr 2025	Low flow/peri pump	Clear, no odour, no sheen, no sediment	5.011	0.071	4.12	282.7	0.13	227.9	21
Mary Creek	Source	0021_MW151	04 Apr 2025	Low flow/peri pump	Clear, no odour, no sheen, no sediment	3.031	0.641	4.23	330.1	1.08	341.8	21.2
Mary Creek	Source	0021_MW152	08 Apr 2025	Bailer	Pale yellow tinge, clear, no odour, no sheen, no sediment	1.939	0.569	4.34	286.3	1.04	283.5	20.9
Mary Creek	Source	0021_MW153	04 Apr 2025	Low flow/peri pump	Clear, no odour or sheen.	4.85	0.74	4.1	338.6	0.25	13.2	18.8
Mary Creek	Source	0021_MW154	04 Apr 2025	Low flow/peri pump	Clear, no odour or sheen.	1.85	0.8	4.08	387.4	2.85	295.8	19.3
Mary Creek	Source	0021_MW155	04 Apr 2025	Low flow/peri pump	Pale brown, clear, no odour or sheen.	2.04	0.36	6.18	755	0.29	-40	18.8
Mary Creek	Pathway	0021_MW021	01 Apr 2025	Low flow/peri pump	Clear, no odour, no sheen, no sediment	8.794	3.651	4.24	918	2.04	202.3	19.6
Mary Creek	Pathway	0021_MW060	01 Apr 2025	Low flow/peri pump	Pale orange-brown tinge, slightly clear, no odour, no sheen, slight grey sediment	3.485	2.221	5.51	201.2	1.75	98.1	21.4
Mary Creek	Pathway	0021_MW070	07 Apr 2025	Low flow/peri pump	Clear, no sediment, slight hydrogen sulfide odour, no sheen	4.64	1.03	4.76	321	0.04	-98	19.7
Mary Creek	Pathway	0021_MW071	07 Apr 2025	Low flow/peri pump	Pale brown, moderate to high turbidity, strong organic odour, no sheen	3.13	0.88	4.98	286.6	0.23	-143.4	18.2
Mary Creek	Pathway	0021_MW072	07 Apr 2025	Low flow/peri pump	Brown, moderate turbidity, organic odour, no sheen.	3.51	0.8	5.6	266.6	0.25	-170.4	17.3
Mary Creek	Pathway	0021_MW112	01 Apr 2025	Low flow/peri pump	Pale yellow tinge, mostly clear, no odour, no sheen, no sediment	2.908	1.052	5.2	351.7	1.62	209	21
Mary Creek	Pathway	0021_MW113	07 Apr 2025	Low flow/peri pump	Clear, no odour or sheen, no sediment, great recharge	2.7	0.975	4.81	188.9	4.51	52.7	20.4
Mary Creek	Pathway	0021_MW133	02 Apr 2025	Low flow/peri pump	Clear, no odour or sheen, good recharge.	10.475	4.675	4.4	397.1	1.47	173.9	18.2
Summercloud Creek	Pathway	0021_MW022	01 Apr 2025	Low flow/peri pump	Pale yellow tinge, mostly clear, no odour, no sheen, no sediment, good recharge	7.461	2.02	4.26	225.1	0.1	235.2	21
Summercloud Creek	Pathway	0021_MW131	01 Apr 2025	Low flow/peri pump	Clear, strong hydrogen sulfide odour, no sheen. Good recharge.	7.08	3.605	5.47	25,295	0.11	-201.5	19.2
Summercloud Creek	Pathway	0021_MW132	01 Apr 2025	Low flow/peri pump	Slight pale brown, cloudy, no odour or sheen.	12.025	4.55	5.44	431.5	0.87	-56.5	17.3

Statistics

Number of Results	82	82	82	82	82	82	82
Number of Detects	82	82	82	82	82	82	82
Minimum Concentration	1.79	0.035	3.9	88.8	0.01	-201.5	17.3
Maximum Concentration	41.155	19.324	7.11	25,295	6.46	362.5	24
Average Concentration *	7.1	2.2	5.3	746	1.4	39	20
Geometric Average *	5	1.3	5.2	390	0.59		20
Median Concentration *	4.6075	1.118	5.3	330.9	1.025	31.55	20.35
Standard Deviation *	8.1	2.8	0.83	2,761	1.6	140	1.6
Geometric Standard Deviation *	2.1	3	1.2	2.1	5.1		1.1
95% UCL (Student's-t) *	8.599	2.76	5.455	1,253	1.749	64.46	20.47
% of Detects	100	100	100	100	100	100	100
% of Non-Detects	0	0	0	0	0	0	0

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids						PFAS - Perfluoroalk				
					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)	Perfluorononane sulfonate (PFNS)	Perfluorodecanesulfonic acid (PFDS)	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	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	0.01	0.01	0.05	0.01	0.01	0.01	0.01
0020_0021_Human health consumption of biota					**0.01**	**0.01**					**0.01**												
PFAS NEMP 2025 Freshwater and Interim Marine 95%					0.13		220																
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																			
Receptor	0021_MW114	04 Apr 2025	0021_MW114_250404	ES2510113	<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
			0021_QC109_250404	ES2510113	<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
			0021_QC209_250404	1210052	<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	<0.05	<0.01	<0.01	<0.01	<0.01
	0021_SW083	04 Apr 2025	0021_SW083_250404	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	<0.02	<0.02	<0.02
	0021_SW212	04 Apr 2025	0021_SW212_250404	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	<0.02	<0.02	<0.02
Statistics																							
Number of Results					5	5	5	5	5	1	5	1	5	1	5	5	1	5	5	5	5	5	5
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	<0.01	<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	ND	ND
Maximum Concentration					<0.01	<0.01	<0.01	<0.1	<0.05	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<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	ND	ND
Average Concentration *					0.005	0.005	0.005	0.014	0.009		0.005		0.009		0.009	0.009		0.009	0.045	0.009	0.009	0.009	0.009
Geometric Average *					0.005	0.005	0.005	0.0079	0.0069	0.005	0.005	0.005	0.0087	0.005	0.0087	0.0087	0.005	0.0087	0.044	0.0087	0.0087	0.0087	0.0087
Median Concentration *					0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.01	0.005	0.01	0.01	0.005	0.01	0.05	0.01	0.01	0.01	0.01
Standard Deviation *					0	0	0	0.02	0.0089		0		0.0022		0.0022	0.0022		0.0022	0.011	0.0022	0.0022	0.0022	0.0022
Geometric Standard Deviation *					1	1	1	2.8	2.1		1		1.4		1.4	1.4		1.4	1.4	1.4	1.4	1.4	1.4
95% UCL (Student's-t) *					0.005	0.005	0.005	0.0332	0.0175		0.005		0.0111		0.0111	0.0111		0.0111	0.0557	0.0111	0.0111	0.0111	0.0111
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.

Environmental Standards

HEPA, March 2025, PFAS NEMP 2025 Freshwater and Interim Marine 95%
JBRF/HMAS Creswell OMP Site Specific Criteria

					tyl Carboxylic Acids					PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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	0.01	0.05	0.01
0020_0021_Human health consumption of biota																				
PFAS NEMP 2025 Freshwater and Interim Marine 95%																				
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																
Receptor	0021_MW114	04 Apr 2025	0021_MW114_250404	ES2510113	<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
			0021_QC109_250404	ES2510113	<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
			0021_QC209_250404	1210052	<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	<0.01	<0.05	<0.01
	0021_SW083	04 Apr 2025	0021_SW083_250404	ES2510623	<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
	0021_SW212	04 Apr 2025	0021_SW212_250404	ES2510623	<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					5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
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	<0.01	<0.05	<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 *					0.009	0.009	0.021	0.009	0.009	0.025	0.013	0.025	0.025	0.013	0.025	0.013	0.021	0.021	0.025	0.021
Geometric Average *					0.0087	0.0087	0.018	0.0087	0.0087	0.025	0.012	0.025	0.025	0.012	0.025	0.012	0.018	0.018	0.025	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
Standard Deviation *					0.0022	0.0022	0.0089	0.0022	0.0022	0	0.0067	0	0	0.0067	0	0.0067	0.0089	0.0089	0	0.0089
Geometric Standard Deviation *					1.4	1.4	2.1	1.4	1.4	1	1.5	1	1	1.5	1	1.5	2.1	2.1	1	2.1
95% UCL (Student's-t) *					0.0111	0.0111	0.0295	0.0111	0.0111	0.025	0.0194	0.025	0.025	0.0194	0.025	0.0194	0.0295	0.0295	0.025	0.0295
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.

Environmental Standards

HEPA, March 2025, PFAS NEMP 2025 Freshwater and Interim Marine 95%
JBRF/HMAS Creswell OMP Site Specific Criteria

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids						PFAS			
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL					0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.05	0.01	0.01	0.01
PFAS NEMP 2025 Freshwater and Interim Marine 95%					0.13[#1]		220[#1]															
PFAS NEMP 2025 Recreational water quality					2[#2]	2[#2]	10[#2]	2[#2]														
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																		
Source	0020_MW052	31 Mar 2025	0020_MW052_250331	ES2510618	0.02	0.02	<0.01	0.04	0.04	0.04	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
	0021_MW028	02 Apr 2025	0021_MW028_250402	ES2510113	0.50	1.03	0.04	1.53	2.79	2.63	-	-	0.10	<0.02	-	0.02	-	0.10	0.1	<0.02	<0.02	0.04
	0021_MW030	03 Apr 2025	0021_MW030_250403	ES2510113	0.04	0.02	<0.01	0.06	0.06	0.06	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
			0021_QC255_250403	1210052	<0.01	<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	<0.05	<0.01	<0.01	<0.01
	0021_MW062	24 Apr 2025	0021_MW062_250424	ES2512435	0.63	0.19	<0.01	0.82	0.82	0.82	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
	0021_MW102	04 Apr 2025	0021_MW102_250404	ES2510113	5.64	2.99	0.17	8.63	11.3	10.5	-	-	0.35	<0.02	-	0.26	-	0.36	0.1	<0.02	<0.02	0.14
	0021_MW109	03 Apr 2025	0021_MW109_250403	ES2510113	1.78	0.94	0.04	2.72	3.25	3.14	-	-	0.05	<0.02	-	0.04	-	0.07	<0.1	<0.02	<0.02	0.02
	0021_MW119	02 Apr 2025	0021_MW119_250402	ES2510113	<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
	0021_MW120	02 Apr 2025	0021_MW120_250402	ES2510113	1.08	2.00	0.05	3.08	3.79	3.50	-	-	0.11	<0.02	-	0.07	-	0.18	<0.1	<0.02	<0.02	0.02
	0021_MW121	02 Apr 2025	0021_MW121_250402	ES2510113	0.02	0.10	<0.01	0.12	0.12	0.12	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
	0021_MW123	02 Apr 2025	0021_MW123_250402	ES2510113	0.70	1.03	0.07	1.73	2.30	2.06	-	-	0.06	<0.02	-	0.11	-	0.13	<0.1	<0.02	<0.02	0.03
	0021_MW127	02 Apr 2025	0021_MW127_250402	ES2510113	0.64	0.73	0.03	1.37	1.75	1.61	-	-	0.07	<0.02	-	0.03	-	0.08	<0.1	<0.02	<0.02	<0.02
	0021_SW001	03 Apr 2025	0021_SW001_250403	ES2510622	3.08	8.35	0.24	11.4	15.2	14.2	-	-	0.39	<0.02	-	0.18	-	0.65	<0.1	<0.02	<0.02	0.22
	0021_SW027	01 Apr 2025	0021_SW027_250401	ES2510622	0.14	0.09	<0.01	0.23	0.23	0.23	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
Pathway	0020_MW012A	08 Apr 2025	0020_MW012_250408	ES2510618	3.41	1.16	0.05	4.57	4.89	4.77	-	-	0.03	<0.02	-	0.06	-	0.06	<0.1	<0.02	<0.02	0.02
	0020_MW057	31 Mar 2025	0020_MW057_250331	ES2510618	0.54	0.44	<0.01	0.98	1.00	0.98	-	-	<0.02	<0.02	-	<0.02	-	0.02	<0.1	<0.02	<0.02	<0.02
	0020_MW058	03 Apr 2025	0020_MW058_250403	ES2510618	2.49	0.57	0.05	3.06	3.17	3.13	-	-	<0.02	<0.02	-	0.02	-	0.02	<0.1	<0.02	<0.02	<0.02
			0020_QC137_250403	ES2510618	2.56	0.57	0.05	3.13	3.23	3.20	-	-	<0.02	<0.02	-	0.03	-	<0.02	<0.1	<0.02	<0.02	<0.02
			0020_QC237_250403	1209674	2.7	0.51	0.06	3.21	3.41	3.33	2.76	3.27	0.01	<0.01	0.02	0.03	<0.01	0.02	<0.05	<0.01	<0.01	0.02
	0020_MW059	31 Mar 2025	0020_MW059_250331	ES2510618	0.44	0.53	<0.01	0.97	1.01	0.99	-	-	0.02	<0.02	-	<0.02	-	0.02	<0.1	<0.02	<0.02	<0.02
	0020_MW071	24 Apr 2025	0020_MW071_250424	ES2512752	<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
	0020_MW102D	31 Mar 2025	0020_MW102D_250331	ES2510618	0.12	0.23	<0.01	0.35	0.39	0.37	-	-	0.02	<0.02	-	<0.02	-	0.02	<0.1	<0.02	<0.02	<0.02
	0020_MW102S	31 Mar 2025	0020_MW102S_250331	ES2510618	0.04	0.05	<0.01	0.09	0.09	0.09	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
	0020_MW104	03 Apr 2025	0020_MW104_250403	ES2510618	<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
			0020_QC138_250403	ES2510618	<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
			0020_QC238_250403	1209674	<0.01	<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	<0.05	<0.01	<0.01	<0.01
	0020_SW011	02 Apr 2025	0020_SW011_250402	ES2510618	0.10	0.14	<0.01	0.24	0.24	0.24	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
	0020_SW057	31 Mar 2025	0020_QC100_250331	ES2510618	0.09	0.05	<0.01	0.14	0.14	0.14	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
			0020_QC200_250331	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	<0.01	<0.05	<0.01	<0.01	<0.01
			0020_SW057_250331	ES2510618	0.08	0.04	<0.01	0.12	0.12	0.12	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
	0021_MW018	02 Apr 2025	0021_MW018_250402	ES2510113	0.03	0.11	<0.01	0.14	0.14	0.14	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
	0021_MW108	04 Apr 2025	0021_MW108_250404	ES2510113	3.18	2.29	0.07	5.47	6.23	5.97	-	-	0.08	<0.02	-	0.11	-	0.13	<0.1	<0.02	<0.02	0.04
	0021_MW124	02 Apr 2025	0021_MW125_250402	ES2510113	0.05	0.09	<0.01	0.14	0.14	0.14	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
		03 Apr 2025	0021_MW124_250403	ES2510113	0.44	0.22	<0.01	0.66	0.66	0.66	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
	0021_MW134	08 Apr 2025	0021_MW134_250408	ES2510113	<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
	0021_SW013	01 Apr 2025	0021_SW013_250401	ES2510622	0.21	0.24	<0.01	0.45	0.45	0.45	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
	0021_SW019	03 Apr 2025	0021_SW019_250403	ES2510622	1.29	1.66	0.07	2.95	3.87	3.61	-	-	0.13	<0.02	-	0.05	-	0.15	<0.1	<0.02	<0.02	0.05
	0021_SW021	02 Apr 2025	0021_QC106_250402	ES2510113	0.20	0.27	0.02	0.47	0.55	0.53	-	-	<0.02	<0.02	-	<0.02	-	0.02	<0.1	<0.02	<0.02	<0.02
			0021_QC206_250402	1210052	0.17	0.33	<0.01	0.5	0.63	0.6	0.17	0.5	0.03	<0.01	<0.01	<0.01	<0.01	0.03	<0.05	<0.01	<0.01	<0.01
			0021_SW021_250402	ES2510622	0.17	0.34	<0.01	0.51	0.61	0.58	-	-	0.02	<0.02	-	<0.02	-	0.03	<0.1	<0.02	<0.02	<0.02
	0021_SW126	03 Apr 2025	0021_SW126_250403	ES2510623	2.48	3.18	0.17	5.66	7.89	7.35	-	-	0.26	<0.02	-	0.12	-	0.33	0.1	<0.02	<0.02	0.12
Receptor	0020_SW004	31 Mar 2025	0020_SW004_250331	ES2510618	0.02	0.02	<0.01	0.04	0.04	0.04	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
	0020_SW005	31 Mar 2025	0020_SW005_250331	ES2510618	0.03	0.02	<0.01	0.05	0.05	0.05	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
	0020_SW010	31 Mar 2025	0020_SW010_250331	ES2510618	0.10	0.06	<0.01	0.16	0.16	0.16	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
	0020_SW012	31 Mar 2025	0020_SW012_250331	ES2510618	0.03	0.02	<0.01	0.05	0.05	0.05	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids						PFAS			
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.05	0.01	0.01	0.01
PFAS NEMP 2025 Freshwater and Interim Marine 95%	0.13[#1]		220[#1]															
PFAS NEMP 2025 Recreational water quality	2[#2]	2[#2]	10[#2]	2[#2]														
Statistics																		
Number of Results	45	45	45	45	45	45	5	5	45	45	5	45	5	45	45	45	45	45
Number of Detects	38	38	15	38	38	38	3	3	16	0	1	14	0	19	3	0	0	11
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	<0.05	<0.01	<0.01	<0.01
Minimum Detect	0.02	0.02	0.02	0.04	0.04	0.04	0.11	0.15	0.01	ND	0.02	0.02	ND	0.02	0.1	ND	ND	0.02
Maximum Concentration	5.64	8.35	0.24	11.4	15.2	14.2	2.76	3.27	0.39	<0.02	0.02	0.26	<0.01	0.65	0.1	<0.02	<0.02	0.22
Maximum Detect	5.64	8.35	0.24	11.4	15.2	14.2	2.76	3.27	0.39	ND	0.02	0.26	ND	0.65	0.1	ND	ND	0.22
Average Concentration *	0.79	0.68	0.03	1.5	1.8	1.7	0.61	0.79	0.045	0.0094	0.008	0.032	0.005	0.059	0.051	0.0094	0.0094	0.023
Geometric Average *	0.15	0.14	0.012	0.27	0.33	0.31	0.066	0.091	0.018	0.0093	0.0066	0.016	0.005	0.021	0.048	0.0093	0.0093	0.014
Median Concentration *	0.14	0.19	0.005	0.35	0.39	0.37	0.11	0.15	0.01	0.01	0.005	0.01	0.005	0.01	0.05	0.01	0.01	0.01
Standard Deviation *	1.3	1.4	0.05	2.4	3.1	2.9	1.2	1.4	0.085	0.0016	0.0067	0.051	0	0.12	0.016	0.0016	0.0016	0.04
Geometric Standard Deviation *	8.8	8	3.5	10	9.5	9.6	14	18	3.1	1.2	1.9	2.7	1	3.5	1.3	1.2	1.2	2.3
95% UCL (Student's-t) *	1.102	1.034	0.0421	2.073	2.585	2.441	1.758	2.124	0.0657	0.00984	0.0144	0.0442	0.005	0.089	0.0544	0.00984	0.00984	0.0331
Number of Env Standard Exceedances	23	5	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Env Standard Exceedances (Detects Only)	23	5	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Detects	84	84	33	84	84	84	60	60	36	0	20	31	0	42	7	0	0	24
% of Non-Detects	16	16	67	16	16	16	40	40	64	100	80	69	100	58	93	100	100	76
% of Detects at or above Env Standards	51	11	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Results Below Env Standards or Non-Detect	49	89	100	76	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 Refer to Table 8 in PFAS NEMP 2025 for comments and notes
#2 Refer to Table 4 in PFAS NEMP 3.0 (2025) for comments and notes

Environmental Standards

HEPA, March 2025, PFAS NEMP 2025 Freshwater and Interim Marine 95%
HEPA, March 2025, PFAS NEMP 2025 Recreational water quality

					- Perfluoroalkyl Carboxylic Acids						PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8.2 FTS)
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL					0.01	0.01	0.01	0.01	0.01	0.01	0.05	0.02	0.05	0.05	0.02	0.05	0.02	0.01	0.01	0.05	0.01
PFAS NEMP 2025 Freshwater and Interim Marine 95%																					
PFAS NEMP 2025 Recreational water quality																					
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																	
Source	0020_MW052	31 Mar 2025	0020_MW052_250331	ES2510618	<0.02	<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
	0021_MW028	02 Apr 2025	0021_MW028_250402	ES2510113	0.63	<0.02	0.19	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	0021_MW030	03 Apr 2025	0021_MW030_250403	ES2510113	<0.02	<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
			0021_QC255_250403	1210052	<0.01	<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	<0.01	<0.05	<0.01
	0021_MW062	24 Apr 2025	0021_MW062_250424	ES2512435	<0.02	<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
	0021_MW102	04 Apr 2025	0021_MW102_250404	ES2510113	0.98	<0.02	0.16	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	0021_MW109	03 Apr 2025	0021_MW109_250403	ES2510113	0.26	<0.02	0.05	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	0021_MW119	02 Apr 2025	0021_MW119_250402	ES2510113	<0.02	<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
	0021_MW120	02 Apr 2025	0021_MW120_250402	ES2510113	0.20	<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	<0.05
	0021_MW121	02 Apr 2025	0021_MW121_250402	ES2510113	<0.02	<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
	0021_MW123	02 Apr 2025	0021_MW123_250402	ES2510113	0.13	<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	<0.05
	0021_MW127	02 Apr 2025	0021_MW127_250402	ES2510113	0.12	<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
	0021_SW001	03 Apr 2025	0021_SW001_250403	ES2510622	1.64	<0.02	0.29	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	0021_SW027	01 Apr 2025	0021_SW027_250401	ES2510622	<0.02	<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
Pathway	0020_MW012A	08 Apr 2025	0020_MW012_250408	ES2510618	0.10	<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
	0020_MW057	31 Mar 2025	0020_MW057_250331	ES2510618	<0.02	<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
	0020_MW058	03 Apr 2025	0020_MW058_250403	ES2510618	0.02	<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
			0020_QC137_250403	ES2510618	0.02	<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
			0020_QC237_250403	1209674	0.03	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	<0.01	<0.05	<0.01
	0020_MW059	31 Mar 2025	0020_MW059_250331	ES2510618	<0.02	<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
	0020_MW071	24 Apr 2025	0020_MW071_250424	ES2512752	<0.02	<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
	0020_MW102D	31 Mar 2025	0020_MW102D_250331	ES2510618	<0.02	<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
	0020_MW102S	31 Mar 2025	0020_MW102S_250331	ES2510618	<0.02	<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
	0020_MW104	03 Apr 2025	0020_MW104_250403	ES2510618	<0.02	<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
			0020_QC138_250403	ES2510618	<0.02	<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
			0020_QC238_250403	1209674	<0.01	<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	<0.01	<0.05	<0.01
	0020_SW011	02 Apr 2025	0020_SW011_250402	ES2510618	<0.02	<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
	0020_SW057	31 Mar 2025	0020_QC100_250331	ES2510618	<0.02	<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
			0020_QC200_250331	1209674	<0.01	<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	<0.01	<0.05	<0.01
			0020_SW057_250331	ES2510618	<0.02	<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
	0021_MW018	02 Apr 2025	0021_MW018_250402	ES2510113	<0.02	<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
	0021_MW108	04 Apr 2025	0021_MW108_250404	ES2510113	0.25	<0.02	0.06	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	0021_MW124	02 Apr 2025	0021_MW125_250402	ES2510113	<0.02	<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
		03 Apr 2025	0021_MW124_250403	ES2510113	<0.02	<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
	0021_MW134	08 Apr 2025	0021_MW134_250408	ES2510113	<0.02	<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
	0021_SW013	01 Apr 2025	0021_SW013_250401	ES2510622	<0.02	<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
	0021_SW019	03 Apr 2025	0021_SW019_250403	ES2510622	0.30	<0.02	0.11	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	0021_SW021	02 Apr 2025	0021_QC106_250402	ES2510113	0.04	<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
			0021_QC206_250402	1210052	0.05	<0.01	0.02	<0.01	<0.01	<0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.05	<0.01
			0021_SW021_250402	ES2510622	0.05	<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
	0021_SW126	03 Apr 2025	0021_SW126_250403	ES2510623	0.74	<0.02	0.30	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Receptor	0020_SW004	31 Mar 2025	0020_SW004_250331	ES2510618	<0.02	<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
	0020_SW005	31 Mar 2025	0020_SW005_250331	ES2510618	<0.02	<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
	0020_SW010	31 Mar 2025	0020_SW010_250331	ES2510618	<0.02	<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
	0020_SW012	31 Mar 2025	0020_SW012_250331	ES2510618	<0.02	<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

	- Perfluoroalkyl Carboxylic Acids						PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
	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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8.2 FTS)
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL	0.01	0.01	0.01	0.01	0.01	0.01	0.05	0.02	0.05	0.05	0.02	0.05	0.02	0.01	0.01	0.05	0.01
PFAS NEMP 2025 Freshwater and Interim Marine 95%																	
PFAS NEMP 2025 Recreational water quality																	
Statistics																	
Number of Results	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45
Number of Detects	17	1	11	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	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.01	<0.01	<0.05	<0.01
Minimum Detect	0.02	0.01	0.02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	1.64	<0.02	0.3	<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	1.64	0.01	0.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *	0.13	0.0096	0.036	0.023	0.0094	0.0094	0.025	0.012	0.025	0.025	0.012	0.025	0.012	0.023	0.023	0.025	0.023
Geometric Average *	0.026	0.0094	0.015	0.021	0.0093	0.0093	0.025	0.011	0.025	0.025	0.011	0.025	0.011	0.021	0.021	0.025	0.021
Median Concentration *	0.01	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 *	0.31	0.0014	0.068	0.0064	0.0016	0.0016	0	0.0048	0	0	0.0048	0	0.0048	0.0064	0.0064	0	0.0064
Geometric Standard Deviation *	4.9	1.2	2.9	1.7	1.2	1.2	1	1.3	1	1	1.3	1	1.3	1.7	1.7	1	1.7
95% UCL (Student's-t) *	0.206	0.00992	0.0526	0.0244	0.00984	0.00984	0.025	0.0129	0.025	0.025	0.0129	0.025	0.0129	0.0244	0.0244	0.025	0.0244
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	38	2	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Non-Detects	62	98	76	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.

Comments

#1 Refer to Table 8 in PFAS NEMP 2025 for comments and notes
#2 Refer to Table 4 in PFAS NEMP 3.0 (2025) for comments and notes

Environmental Standards

HEPA, March 2025, PFAS NEMP 2025 Freshwater and Interim Marine 95%
HEPA, March 2025, PFAS NEMP 2025 Recreational water quality

					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)	Perfluorotetradecanoic acid (PFTeDA)
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL					0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.1	0.02	0.02	0.02	0.02	0.02	0.02	0.05
0020_0021 Human health consumption of biota					**0.01**	**0.01**				**0.01**												
PFAS NEMP 2025 Freshwater and Interim Marine 95%					0.13		220															
PFAS NEMP 2025 Recreational water quality					2	2	10			2												
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																		
Receptor	0021_MW020	02 Apr 2025	0021_MW020_250402	ES2510113	<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	<0.05
	0021_SW076	02 Apr 2025	0021_SW076_250402	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	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05
	0021_SW078	02 Apr 2025	0021_SW078_250402	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	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05
	0021_SW079	02 Apr 2025	0021_SW079_250402	ES2510623	**0.04**	**0.02**	<0.01	0.06	0.06	**0.06**	<0.02	<0.02	<0.02	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05
	0021_SW080	02 Apr 2025	0021_SW080_250402	ES2510623	**0.02**	**0.01**	<0.01	0.03	0.03	**0.03**	<0.02	<0.02	<0.02	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05
Statistics																						
Number of Results					5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Number of Detects					2	2	0	2	2	2	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	<0.05
Minimum Detect					0.02	0.01	ND	0.03	0.03	0.03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration					0.04	0.02	<0.01	0.06	0.06	0.06	<0.02	<0.02	<0.02	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05
Maximum Detect					0.04	0.02	ND	0.06	0.06	0.06	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *					0.015	0.009	0.005	0.021	0.021	0.021	0.01	0.01	0.01	0.01	0.05	0.01	0.01	0.01	0.01	0.01	0.01	0.025
Geometric Average *					0.01	0.0076	0.005	0.012	0.012	0.012	0.01	0.01	0.01	0.01	0.05	0.01	0.01	0.01	0.01	0.01	0.01	0.025
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	0.025
Standard Deviation *					0.015	0.0065	0	0.024	0.024	0.024	0	0	0	0	0	0	0	0	0	0	0	0
Geometric Standard Deviation *					2.7	1.9	1	3.3	3.3	3.3	1	1	1	1	1	1	1	1	1	1	1	1
95% UCL (Student's-t) *					0.0297	0.0152	0.005	0.0442	0.0442	0.0442	0.01	0.01	0.01	0.01	0.05	0.01	0.01	0.01	0.01	0.01	0.01	0.025
Number of Env Standard Exceedances					2	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Number of Env Standard Exceedances (Detects Only)					2	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
% of Detects					40	40	0	40	40	40	0	0	0	0	0	0	0	0	0	0	0	0
% of Non-Detects					60	60	100	60	60	60	100	100	100	100	100	100	100	100	100	100	100	100
% of Detects at or above Env Standards					40	20	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0
% of Results Below Env Standards or Non-Detect					60	80	100	100	100	60	100	100	100	100	100	100	100	100	100	100	100	100

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

HEPA, March 2025, PFAS NEMP 2025 Freshwater and Interim Marine 95%
HEPA, March 2025, PFAS NEMP 2025 Recreational water quality
JBRF/HMAS Creswell OMP Site Specific Criteria

						PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					Perfluorotridecanoic acid (PFTrDA)	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 (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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
EQL					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 2025 Freshwater and Interim Marine 95%																	
PFAS NEMP 2025 Recreational water quality																	
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**													
Receptor	0021_MW020	02 Apr 2025	0021_MW020_250402	ES2510113	<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
	0021_SW076	02 Apr 2025	0021_SW076_250402	ES2510623	<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
	0021_SW078	02 Apr 2025	0021_SW078_250402	ES2510623	<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
	0021_SW079	02 Apr 2025	0021_SW079_250402	ES2510623	<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
	0021_SW080	02 Apr 2025	0021_SW080_250402	ES2510623	<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					5	5	5	5	5	5	5	5	5	5	5	5	5
Number of Detects					0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration					<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
Minimum Detect					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration					<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
Maximum Detect					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *					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
Geometric Average *					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
Median Concentration *					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	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
95% UCL (Student's-t) *					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
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.

Environmental Standards

HEPA, March 2025, PFAS NEMP 2025 Freshwater and Interim Marine 95%
HEPA, March 2025, PFAS NEMP 2025 Recreational water quality
JBRF/HMAS Creswell OMP Site Specific Criteria

Appendix B
Table B3d
April 2025 OMP Surface water and Groundwater Analytical Results: Flatrock Creek

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids						PFAS			
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL					0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.05	0.01	0.01	0.01
PFAS NEMP 2025 Freshwater and Interim Marine 95%					0.13[#1]		220[#1]															
PFAS NEMP 2025 Recreational water quality					2[#2]	2[#2]	10[#2]	2[#2]														
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																		
Source	0020_MW037	31 Mar 2025	0020_MW037_250331	ES2510618	2.51	5.16	0.44	7.67	18.1	16.6	-	-	0.90	<0.02	-	0.35	-	0.73	0.4	<0.02	<0.02	0.32
			0020_QC131_250331	ES2510618	2.24	5.67	0.45	7.91	18.4	16.8	-	-	0.86	<0.02	-	0.39	-	0.84	0.4	<0.02	<0.02	0.31
			0020_QC231_250331	1209674	2.2	5.9	0.50	8.1	19.02	17.51	2.7	8.6	0.94	<0.01	<0.01	0.39	0.35	0.77	0.47	<0.01	<0.01	0.30
	0020_MW112	31 Mar 2025	0020_MW112_250331	ES2510618	0.14	0.47	0.05	0.61	0.95	0.90	-	-	0.06	<0.02	-	<0.02	-	0.05	<0.1	<0.02	<0.02	0.04
			0020_QC130_250331	ES2510618	0.07	0.41	0.04	0.48	0.77	0.73	-	-	0.05	<0.02	-	<0.02	-	0.04	<0.1	<0.02	<0.02	0.03
			0020_QC230_250331	1209674	0.08	0.46	0.06	0.54	0.9	0.85	0.14	0.6	0.05	<0.01	<0.01	<0.01	0.01	0.04	<0.05	<0.01	<0.01	0.03
	0020_MW115	31 Mar 2025	0020_MW115_250331	ES2510618	0.93	0.11	<0.01	1.04	1.04	1.04	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
	0020_SW016	31 Mar 2025	0020_SW016_250331	ES2510618	0.60	0.15	<0.01	0.75	0.78	0.78	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
	0020_SW018	31 Mar 2025	0020_QC150_250331	ES2510618	0.34	0.16	0.01	0.50	0.54	0.54	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
			0020_SW018_250331	ES2510618	0.27	0.15	<0.01	0.42	0.45	0.45	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
	0021_MW025	02 Apr 2025	0021_MW025_250402	ES2510113	<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
	0021_MW026	07 Apr 2025	0021_MW026_250407	ES2510113	<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
	0021_MW117	02 Apr 2025	0021_MW117_250402	ES2510113	0.04	0.17	<0.01	0.21	0.23	0.21	-	-	<0.02	<0.02	-	<0.02	-	0.02	<0.1	<0.02	<0.02	<0.02
	0021_MW118	02 Apr 2025	0021_MW118_250402	ES2510113	0.64	0.53	<0.01	1.17	1.22	1.19	-	-	0.02	<0.02	-	<0.02	-	0.03	<0.1	<0.02	<0.02	<0.02
Pathway	0020_MW001	07 Apr 2025	0020_MW001_250407	ES2510618	<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
	0020_MW007	07 Apr 2025	0020_MW007_250407	ES2510618	0.10	0.14	<0.01	0.24	0.28	0.28	-	-	0.04	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
	0020_MW017	31 Mar 2025	0020_MW017_250331	ES2510618	0.98	0.27	0.01	1.25	1.31	1.29	-	-	<0.02	<0.02	-	0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
	0020_MW068	01 Apr 2025	0020_MW068_250401	ES2510618	<0.01	0.14	<0.01	0.14	0.14	0.14	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
	0020_MW069	24 Apr 2025	0020_MW069_250424	ES2512752	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
	0020_MW070	24 Apr 2025	0020_MW070_250424	ES2512752	0.50	0.15	<0.01	0.65	0.65	0.65	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
			0020_QC120_250424	ES2512752	0.49	0.13	<0.01	0.62	0.62	0.62	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
	0020_MW109	31 Mar 2025	0020_MW109_250331	ES2510618	1.20	0.39	0.03	1.59	1.87	1.78	-	-	<0.02	<0.02	-	0.07	-	0.02	<0.1	<0.02	<0.02	<0.02
	0020_MW110	31 Mar 2025	0020_MW110_250331	ES2510618	3.95	1.02	0.07	4.97	5.43	5.27	-	-	0.04	<0.02	-	0.12	-	0.04	<0.1	<0.02	<0.02	0.03
	0020_MW111	03 Apr 2025	0020_MW111_250403	ES2510618	18.6	1.94	0.14	20.5	23.1	22.7	-	-	0.09	<0.02	-	0.07	-	0.13	0.2	<0.02	<0.02	0.24
	0020_SW022	31 Mar 2025	0020_QC133_250331	ES2510618	0.19	0.11	<0.01	0.30	0.33	0.33	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
			0020_QC233_250331	1209674	0.21	0.12	<0.01	0.33	0.4	0.4	0.21	0.33	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01
			0020_SW022_250331	ES2510618	0.18	0.11	<0.01	0.29	0.31	0.31	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
	0020_SW023	31 Mar 2025	0020_SW023_250331	ES2510618	0.20	0.10	<0.01	0.30	0.44	0.44	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
	0020_SW030	31 Mar 2025	0020_SW030_250331	ES2510618	0.07	0.12	<0.01	0.19	0.19	0.19	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
	0020_SW032	31 Mar 2025	0020_QC152_250331	ES2510618	<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
			0020_SW032_250331	ES2510618	<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
	0021_MW126	01 Apr 2025	0021_MW126_250401	ES2510113	<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
			0021_QC105_250401	ES2510113	<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
			0021_QC205_250401	1210052	<0.01	<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	<0.05	<0.01	<0.01	<0.01
	0021_MW128	02 Apr 2025	0021_MW128_250402	ES2510113	<0.01	0.04	<0.01	0.04	0.04	0.04	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
			0021_QC155_250402	ES2510113	<0.01	0.03	<0.01	0.03	0.03	0.03	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
	0021_MW160	02 Apr 2025	0021_MW160_250402	ES2510113	<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
			0021_QC254_250402	1210052	<0.01	<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	<0.05	<0.01	<0.01	<0.01
	0021_MW163	02 Apr 2025	0021_MW163_250402	ES2510113	0.51	0.12	<0.01	0.63	0.63	0.63	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
	0021_MW164	02 Apr 2025	0021_MW164_250402	ES2510113	2.86	0.26	<0.01	3.12	3.41	3.12	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
	0021_SW020	02 Apr 2025	0021_SW020_250402	ES2510622	0.09	0.16	<0.01	0.25	0.25	0.25	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
	0021_SW022	03 Apr 2025	0021_SW022_250403	ES2510622	0.16	0.23	<0.01	0.39	0.39	0.39	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
	0021_SW024	03 Apr 2025	0021_SW024_250403	ES2510622	<0.01	0.03	<0.01	0.03	0.03	0.03	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
	0021_SW025	04 Apr 2025	0021_SW025_250404	ES2510622	0.10	0.08	<0.01	0.18	0.18	0.18	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
Receptor	0020_SW026	01 Apr 2025	0020_QC251_250401	1209674	<0.01	<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	<0.05	<0.01	<0.01	<0.01
			0020_SW026_250401	ES2510618	<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
	0020_SW027	01 Apr 2025	0020_QC250_250401	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	<0.01	<0.05	<0.01	<0.01	<0.01
			0020_SW027_250401	ES2510618	0.04	0.04	<0.01	0.08	0.08	0.08	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
	0020_SW029	31 Mar 2025	0020_SW029_250331	ES2510618	0.04	0.04	<0.01	0.08	0.08	0.08	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
	0020_SW033	01 Apr 2025	0020_SW033_250401	ES2510618	<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

Appendix B
Table B3d
April 2025 OMP Surface water and Groundwater Analytical Results: Flatrock Creek

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids						PFAS			
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.05	0.01	0.01	0.01
PFAS NEMP 2025 Freshwater and Interim Marine 95%	0.13[#1]		220[#1]															
PFAS NEMP 2025 Recreational water quality	2[#2]	2[#2]	10[#2]	2[#2]														
Statistics																		
Number of Results	50	50	50	50	50	50	7	7	50	50	7	50	7	50	50	50	50	50
Number of Detects	33	37	11	37	37	37	4	4	11	0	0	7	2	11	4	0	0	8
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	<0.05	<0.01	<0.01	<0.01
Minimum Detect	0.04	0.03	0.01	0.03	0.03	0.03	0.06	0.11	0.02	ND	ND	0.02	0.01	0.02	0.2	ND	ND	0.03
Maximum Concentration	18.6	5.9	0.5	20.5	23.1	22.7	2.7	8.6	0.94	<0.02	<0.01	0.39	0.35	0.84	0.47	<0.02	<0.02	0.32
Maximum Detect	18.6	5.9	0.5	20.5	23.1	22.7	2.7	8.6	0.94	ND	ND	0.39	0.35	0.84	0.47	ND	ND	0.32
Average Concentration *	0.81	0.51	0.04	1.3	2.1	1.9	0.45	1.4	0.069	0.0093	0.005	0.036	0.055	0.061	0.072	0.0093	0.0093	0.034
Geometric Average *	0.077	0.075	0.009	0.15	0.19	0.18	0.048	0.081	0.016	0.0091	0.005	0.013	0.01	0.015	0.054	0.0091	0.0091	0.013
Median Concentration *	0.085	0.115	0.005	0.245	0.265	0.265	0.06	0.11	0.01	0.01	0.005	0.01	0.005	0.01	0.05	0.01	0.01	0.01
Standard Deviation *	2.7	1.3	0.11	3.4	5.4	5	1	3.2	0.21	0.0018	0	0.089	0.13	0.18	0.093	0.0018	0.0018	0.078
Geometric Standard Deviation *	10	7.5	3.6	11	11	11	11	19	3.3	1.3	1	2.8	4.9	3.3	1.8	1.3	1.3	2.7
95% UCL (Student's-t) *	1.456	0.821	0.0662	2.123	3.329	3.136	1.179	3.723	0.119	0.00972	0.005	0.0573	0.151	0.105	0.0944	0.00972	0.00972	0.0524
Number of Env Standard Exceedances	22	3	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Env Standard Exceedances (Detects Only)	22	3	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Detects	66	74	22	74	74	74	57	57	22	0	0	14	29	22	8	0	0	16
% of Non-Detects	34	26	78	26	26	26	43	43	78	100	100	86	71	78	92	100	100	84
% of Detects at or above Env Standards	44	6	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Results Below Env Standards or Non-Detect	56	94	100	88	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 Refer to Table 8 in PFAS NEMP 2025 for comments and notes
#2 Refer to Table 4 in PFAS NEMP 3.0 (2025) for comments and notes

Environmental Standards
HEPA, March 2025, PFAS NEMP 2025 Freshwater and Interim Marine 95%
HEPA, March 2025, PFAS NEMP 2025 Recreational water quality

Appendix B
Table B3d
April 2025 OMP Surface water and Groundwater Analytical Results: Flatrock Creek

					- Perfluoroalkyl Carboxylic Acids						PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 FTS)
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL					0.01	0.01	0.01	0.01	0.01	0.01	0.05	0.02	0.05	0.05	0.02	0.05	0.02	0.01	0.01	0.05	0.01
PFAS NEMP 2025 Freshwater and Interim Marine 95%																					
PFAS NEMP 2025 Recreational water quality																					
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																	
Source	0020_MW037	31 Mar 2025	0020_MW037_250331	ES2510618	2.09	<0.02	1.21	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	3.58	<0.05
			0020_QC131_250331	ES2510618	1.83	<0.02	1.17	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	3.87	<0.05
			0020_QC231_250331	1209674	1.9	<0.01	1.3	<0.01	<0.01	<0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.1	4.0	<0.01
	0020_MW112	31 Mar 2025	0020_MW112_250331	ES2510618	0.10	<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	<0.05
			0020_QC130_250331	ES2510618	0.09	<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	<0.05
			0020_QC230_250331	1209674	0.11	<0.01	0.06	<0.01	<0.01	<0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.05	<0.01
	0020_MW115	31 Mar 2025	0020_MW115_250331	ES2510618	<0.02	<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
	0020_SW016	31 Mar 2025	0020_SW016_250331	ES2510618	0.03	<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
	0020_SW018	31 Mar 2025	0020_QC150_250331	ES2510618	0.03	<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
			0020_SW018_250331	ES2510618	0.03	<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
	0021_MW025	02 Apr 2025	0021_MW025_250402	ES2510113	<0.02	<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
	0021_MW026	07 Apr 2025	0021_MW026_250407	ES2510113	<0.02	<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
	0021_MW117	02 Apr 2025	0021_MW117_250402	ES2510113	<0.02	<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
	0021_MW118	02 Apr 2025	0021_MW118_250402	ES2510113	<0.02	<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
Pathway	0020_MW001	07 Apr 2025	0020_MW001_250407	ES2510618	<0.02	<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
	0020_MW007	07 Apr 2025	0020_MW007_250407	ES2510618	<0.02	<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
	0020_MW017	31 Mar 2025	0020_MW017_250331	ES2510618	0.03	<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
	0020_MW068	01 Apr 2025	0020_MW068_250401	ES2510618	<0.02	<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
	0020_MW069	24 Apr 2025	0020_MW069_250424	ES2512752	<0.02	<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
	0020_MW070	24 Apr 2025	0020_MW070_250424	ES2512752	<0.02	<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
			0020_QC120_250424	ES2512752	<0.02	<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
	0020_MW109	31 Mar 2025	0020_MW109_250331	ES2510618	0.12	<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	<0.05
	0020_MW110	31 Mar 2025	0020_MW110_250331	ES2510618	0.06	<0.02	0.10	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	0020_MW111	03 Apr 2025	0020_MW111_250403	ES2510618	0.49	0.06	0.70	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	0.26	<0.05
	0020_SW022	31 Mar 2025	0020_QC133_250331	ES2510618	0.03	<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
			0020_QC233_250331	1209674	0.03	<0.01	0.02	<0.01	<0.01	<0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.05	<0.01
			0020_SW022_250331	ES2510618	0.02	<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
	0020_SW023	31 Mar 2025	0020_SW023_250331	ES2510618	0.03	<0.02	0.03	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	0.08	<0.05
	0020_SW030	31 Mar 2025	0020_SW030_250331	ES2510618	<0.02	<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
	0020_SW032	31 Mar 2025	0020_QC152_250331	ES2510618	<0.02	<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
			0020_SW032_250331	ES2510618	<0.02	<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
	0021_MW126	01 Apr 2025	0021_MW126_250401	ES2510113	<0.02	<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
			0021_QC105_250401	ES2510113	<0.02	<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
			0021_QC205_250401	1210052	<0.01	<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	<0.01	<0.05	<0.01
	0021_MW128	02 Apr 2025	0021_MW128_250402	ES2510113	<0.02	<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
			0021_QC155_250402	ES2510113	<0.02	<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
	0021_MW160	02 Apr 2025	0021_MW160_250402	ES2510113	<0.02	<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
			0021_QC254_250402	1210052	<0.01	<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	<0.01	<0.05	<0.01
	0021_MW163	02 Apr 2025	0021_MW163_250402	ES2510113	<0.02	<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
	0021_MW164	02 Apr 2025	0021_MW164_250402	ES2510113	<0.02	<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
	0021_SW020	02 Apr 2025	0021_SW020_250402	ES2510622	<0.02	<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
	0021_SW022	03 Apr 2025	0021_SW022_250403	ES2510622	<0.02	<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
	0021_SW024	03 Apr 2025	0021_SW024_250403	ES2510622	<0.02	<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
	0021_SW025	04 Apr 2025	0021_SW025_250404	ES2510622	<0.02	<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
Receptor	0020_SW026	01 Apr 2025	0020_QC251_250401	1209674	<0.01	<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	<0.01	<0.05	<0.01
			0020_SW026_250401	ES2510618	<0.02	<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
	0020_SW027	01 Apr 2025	0020_QC250_250401	1209674	<0.01	<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	<0.01	<0.05	<0.01
			0020_SW027_250401	ES2510618	<0.02	<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
	0020_SW029	31 Mar 2025	0020_SW029_250331	ES2510618	<0.02	<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
	0020_SW033	01 Apr 2025	0020_SW033_250401	ES2510618	<0.02	<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

Appendix B
Table B3d
April 2025 OMP Surface water and Groundwater Analytical Results: Flatrock Creek

	- Perfluoroalkyl Carboxylic Acids						PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
	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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 FTS)
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL	0.01	0.01	0.01	0.01	0.01	0.01	0.05	0.02	0.05	0.05	0.02	0.05	0.02	0.01	0.01	0.05	0.01
PFAS NEMP 2025 Freshwater and Interim Marine 95%																	
PFAS NEMP 2025 Recreational water quality																	
Statistics																	
Number of Results	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
Number of Detects	17	1	11	0	0	0	0	0	0	0	0	0	0	0	0	5	0
Minimum Concentration	<0.01	<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	<0.01	<0.05	<0.01
Minimum Detect	0.02	0.06	0.02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.08	ND
Maximum Concentration	2.09	0.06	1.3	<0.05	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	4	<0.05
Maximum Detect	2.09	0.06	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	ND
Average Concentration *	0.15	0.01	0.1	0.022	0.0093	0.0093	0.025	0.012	0.025	0.025	0.012	0.025	0.012	0.022	0.023	0.26	0.022
Geometric Average *	0.021	0.0094	0.017	0.02	0.0091	0.0091	0.025	0.011	0.025	0.025	0.011	0.025	0.011	0.02	0.021	0.036	0.02
Median Concentration *	0.01	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 *	0.46	0.0074	0.3	0.007	0.0018	0.0018	0	0.0053	0	0	0.0053	0	0.0053	0.007	0.0076	0.91	0.007
Geometric Standard Deviation *	4.4	1.4	3.9	1.8	1.3	1.3	1	1.4	1	1	1.4	1	1.4	1.8	1.7	3.5	1.8
95% UCL (Student's-t) *	0.257	0.0121	0.174	0.0239	0.00972	0.00972	0.025	0.0133	0.025	0.025	0.0133	0.025	0.0133	0.0239	0.0249	0.474	0.0239
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	34	2	22	0	0	0	0	0	0	0	0	0	0	0	0	10	0
% of Non-Detects	66	98	78	100	100	100	100	100	100	100	100	100	100	100	100	90	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 Refer to Table 8 in PFAS NEMP 2025 for comments and notes
#2 Refer to Table 4 in PFAS NEMP 3.0 (2025) for comments and notes

Environmental Standards
HEPA, March 2025, PFAS NEMP 2025 Freshwater and Interim Marine 95%
HEPA, March 2025, PFAS NEMP 2025 Recreational water quality

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids						PFAS			
					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)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL					0.0001	0.0005	0.0005	0.0003	0.0003	0.001	0.0003	0.001	0.0005	0.0005	0.001	0.0005	0.001	0.0005	0.002	0.0005	0.0005	0.0005
0020_0021_Human health consumption of biota					**0.01**	**0.01**					**0.01**											
PFAS NEMP 2025 Freshwater and Interim Marine 95%					0.13		220															
PFAS NEMP 2025 Drinking water quality					0.07[#1]	0.07[#1]	0.56[#1]				0.07[#1]											
PFAS NEMP 2025 Recreational water quality					2	2	10				2											
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																		
Pathway	0021_MW129	04 Apr 2025	0021_MW129_250404	ES2510113	0.0008	<0.0005	<0.0005	0.0008	0.0008	-	0.0008	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005
	0021_MW130	04 Apr 2025	0021_MW130_250404	ES2510113	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	-	<0.0003	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005
	0021_MW135	04 Apr 2025	0021_MW135_250404	ES2510113	0.0020	<0.0005	<0.0005	0.0180	0.0180	-	0.0020	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005
	0021_MW136	04 Apr 2025	0021_MW136_250404	ES2510113	0.0006	<0.0005	<0.0005	0.0006	0.0006	-	0.0006	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005
	0021_MW137	04 Apr 2025	0021_MW137_250404	ES2510113	**0.0129**	0.0061	<0.0005	0.0209	0.0202	-	**0.0190**	-	0.0012	<0.0005	-	<0.0005	-	0.0007	<0.002	<0.0005	<0.0005	<0.0005
	0021_MW138	03 Apr 2025	0021_MW138_250403	ES2510113	<0.0003	<0.0005	<0.0005	0.0090	0.0090	-	<0.0003	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005
	0021_MW139	03 Apr 2025	0021_MW139_250403	ES2510113	0.0004	<0.0005	<0.0005	0.0004	0.0004	-	0.0004	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005
			0021_QC108_250403	ES2510113	0.0004	<0.0005	<0.0005	0.0004	0.0004	-	0.0004	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005
			0021_QC208_250403	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	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001
	0021_MW140	03 Apr 2025	0021_MW140_250403	ES2510113	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	-	<0.0003	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005
	0021_SW035	03 Apr 2025	0021_QC107_250403	ES2510113	<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
			0021_SW035_250403	ES2510622	<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
Receptor	0021_SW032	04 Apr 2025	0021_SW032_250404	ES2510622	<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
	0021_SW034	04 Apr 2025	0021_SW034_250404	ES2510622	<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
	0021_SW036	04 Apr 2025	0021_SW036_250404	ES2510622	0.0009	<0.0005	<0.0005	0.0009	0.0009	-	0.0009	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005
	0021_SW037	07 Apr 2025	0021_SW037_250407	ES2510622	0.0007	<0.0005	<0.0005	0.0007	0.0007	-	0.0007	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005
	0021_SW040	04 Apr 2025	0021_SW040_250404	ES2510622	0.0007	<0.0005	<0.0005	0.0007	0.0007	-	0.0007	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005

Statistics

Number of Results	17	17	17	17	17	1	17	1	17	17	1	17	1	17	17	17	17	17
Number of Detects	10	1	0	10	10	0	9	0	1	0	0	0	0	1	0	0	0	0
Minimum Concentration	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	<0.001	<0.0003	<0.001	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.0005	<0.002	<0.0005	<0.0005	<0.0005
Minimum Detect	0.0004	0.0061	ND	0.0004	0.0004	ND	0.0004	ND	0.0012	ND	ND	ND	ND	0.0007	ND	ND	ND	ND
Maximum Concentration	0.0129	<0.01	<0.01	0.0209	0.0202	<0.001	0.019	<0.001	<0.02	<0.02	<0.001	<0.02	<0.001	<0.02	<0.1	<0.02	<0.02	<0.02
Maximum Detect	0.0129	0.0061	ND	0.0209	0.0202	ND	0.019	ND	0.0012	ND	ND	ND	ND	0.0007	ND	ND	ND	ND
Average Concentration *	0.0024	0.0017	0.0014	0.0044	0.0044		0.0027		0.0026	0.0026		0.0026		0.0026	0.013	0.0026	0.0026	0.0026
Geometric Average *	0.001	0.00064	0.00053	0.0016	0.0016	0.0005	0.001	0.0005	0.00068	0.00062	0.0005	0.00062	0.0005	0.00066	0.0026	0.00062	0.00062	0.00062
Median Concentration *	0.0007	0.00025	0.00025	0.0009	0.0009	0.0005	0.0007	0.0005	0.00025	0.00025	0.0005	0.00025	0.0005	0.00025	0.001	0.00025	0.00025	0.00025
Standard Deviation *	0.0033	0.0023	0.0021	0.0062	0.0061		0.0046		0.0042	0.0043		0.0043		0.0042	0.021	0.0043	0.0043	0.0043
Geometric Standard Deviation *	4	4.1	3.7	4.8	4.8		4.2		4.9	4.9		4.9		4.9	5.4	4.9	4.9	4.9
95% UCL (Student's-t) *	0.00379	0.00272	0.00226	0.00706	0.00697		0.00469		0.00441	0.00436		0.00436		0.00438	0.0217	0.00436	0.00436	0.00436
Number of Env Standard Exceedances	1	0	0	0	0	0	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	1	0	0	0	0	0	0	0	0	0	0	0
% of Detects	59	6	0	59	59	0	53	0	6	0	0	0	0	6	0	0	0	0
% of Non-Detects	41	94	100	41	41	100	47	100	94	100	100	100	100	94	100	100	100	100
% of Detects at or above Env Standards	6	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0
% of Results Below Env Standards or Non-Detect	94	100	100	100	100	100	94	100	100	100	100	100	100	100	100	100	100	100

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Applicable to Lake Windermere surface water locations only (0021_SW036, 0021_SW037, 0021_SW038, and 0021_SW040)

Environmental Standards

HEPA, March 2025, PFAS NEMP 2025 Drinking water quality
HEPA, March 2025, PFAS NEMP 2025 Freshwater and Interim Marine 95%
HEPA, March 2025, PFAS NEMP 2025 Recreational water quality
JBRF/HMAS Creswell OMP Site Specific Criteria

					- Perfluoroalkyl Carboxylic Acids						PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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					0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	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 2025 Freshwater and Interim Marine 95%																					
PFAS NEMP 2025 Drinking water quality																					
PFAS NEMP 2025 Recreational water quality																					
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																	
Pathway	0021_MW129	04 Apr 2025	0021_MW129_250404	ES2510113	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
	0021_MW130	04 Apr 2025	0021_MW130_250404	ES2510113	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
	0021_MW135	04 Apr 2025	0021_MW135_250404	ES2510113	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	0.016	<0.001
	0021_MW136	04 Apr 2025	0021_MW136_250404	ES2510113	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
	0021_MW137	04 Apr 2025	0021_MW137_250404	ES2510113	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
	0021_MW138	03 Apr 2025	0021_MW138_250403	ES2510113	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	0.009	<0.001
	0021_MW139	03 Apr 2025	0021_MW139_250403	ES2510113	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
			0021_QC108_250403	ES2510113	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
			0021_QC208_250403	1210052	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.005	<0.001
	0021_MW140	03 Apr 2025	0021_MW140_250403	ES2510113	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
	0021_SW035	03 Apr 2025	0021_QC107_250403	ES2510113	<0.02	<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
			0021_SW035_250403	ES2510622	<0.02	<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
Receptor	0021_SW032	04 Apr 2025	0021_SW032_250404	ES2510622	<0.02	<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
	0021_SW034	04 Apr 2025	0021_SW034_250404	ES2510622	<0.02	<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
	0021_SW036	04 Apr 2025	0021_SW036_250404	ES2510622	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
	0021_SW037	07 Apr 2025	0021_SW037_250407	ES2510622	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
	0021_SW040	04 Apr 2025	0021_SW040_250404	ES2510622	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001

Statistics

Number of Results	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
Minimum Concentration	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.009	ND
Maximum Concentration	<0.02	<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
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.016	ND
Average Concentration *	0.0026	0.0026	0.0026	0.0061	0.0026	0.0026	0.0064	0.0027	0.0064	0.0064	0.0027	0.0064	0.0027	0.0063	0.0063	0.0078	0.0063
Geometric Average *	0.00062	0.00062	0.00062	0.00077	0.00062	0.00062	0.0014	0.00068	0.0014	0.0014	0.00068	0.0014	0.00068	0.0013	0.0013	0.002	0.0013
Median Concentration *	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.0005	0.00025	0.0005	0.0005	0.00025	0.0005	0.00025	0.0005	0.0005	0.0005	0.0005
Standard Deviation *	0.0043	0.0043	0.0043	0.011	0.0043	0.0043	0.011	0.0042	0.011	0.011	0.0042	0.011	0.0042	0.011	0.011	0.011	0.011
Geometric Standard Deviation *	4.9	4.9	4.9	7.4	4.9	4.9	5.5	5.1	5.5	5.5	5.1	5.5	5.1	5.5	5.5	6	5.5
95% UCL (Student's-t) *	0.00436	0.00436	0.00436	0.0107	0.00436	0.00436	0.0109	0.00446	0.0109	0.0109	0.00446	0.0109	0.00446	0.0108	0.0108	0.0123	0.0108
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	12	0
% of Non-Detects	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	88	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 Applicable to Lake Windermere surface water locations only (0021_SW036, 0021_SW037, 0021_

Environmental Standards

HEPA, March 2025, PFAS NEMP 2025 Drinking water quality
HEPA, March 2025, PFAS NEMP 2025 Freshwater and Interim Marine 95%
HEPA, March 2025, PFAS NEMP 2025 Recreational water quality
JBRF/HMAS Creswell OMP Site Specific Criteria

					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)	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)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL					0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.05	0.01	0.01	0.01	0.01	0.01
PFAS NEMP 2025 Freshwater and Interim Marine 95%					0.13[#1]		220[#1]																	
PFAS NEMP 2025 Recreational water quality					2[#2]	2[#2]	10[#2]		2[#2]															
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																				
Source	0021_MW024	01 Apr 2025	0021_MW024_250401	ES2510113	<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
	0021_MW061	24 Apr 2025	0021_MW061_250424	ES2512435	0.07	0.03	<0.01	0.10	0.10	0.10	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
	0021_MW063	03 Apr 2025	0021_MW063_250403	ES2510113	1.57	1.08	0.05	3.02	2.65	2.86	-	-	0.06	<0.02	-	0.07	-	0.09	<0.1	<0.02	<0.02	<0.02	0.08	<0.02
	0021_MW064	03 Apr 2025	0021_MW064_250403	ES2510113	0.18	0.47	<0.01	1.13	0.65	0.95	-	-	0.13	<0.02	-	<0.02	-	0.14	<0.1	<0.02	<0.02	<0.02	0.14	<0.02
	0021_MW065	03 Apr 2025	0021_MW065_250403	ES2510113	0.36	0.45	0.03	1.32	0.81	1.24	-	-	0.08	<0.02	-	<0.02	-	0.06	<0.1	<0.02	<0.02	<0.02	0.26	<0.02
	0021_MW101	04 Apr 2025	0021_MW101_250404	ES2510113	0.28	0.07	<0.01	0.35	0.35	0.35	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
	0021_MW103	03 Apr 2025	0021_MW103_250403	ES2510113	16.9	3.07	0.10	21.8	20.0	21.2	-	-	0.28	<0.02	-	0.16	-	0.32	<0.1	<0.02	<0.02	0.07	0.66	<0.02
	0021_MW104	03 Apr 2025	0021_MW104_250403	ES2510113	0.12	0.05	<0.01	0.17	0.17	0.17	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
	0021_MW105	03 Apr 2025	0021_MW105_250403	ES2510113	16.0	3.43	0.09	20.5	19.4	19.9	-	-	0.07	<0.02	-	0.17	-	0.16	<0.1	<0.02	<0.02	0.04	0.27	<0.02
			0021_QC256_250403	1210052	21	4.2	0.09	26.33	25.2	25.67	21.09	25.29	<0.2	<0.01	0.27	0.24	0.02	0.13	<0.05	<0.01	<0.01	0.04	0.30	<0.01
	0021_MW106	04 Apr 2025	0021_MW106_250404	ES2510113	62.8	17.6	0.83	88.9	80.4	85.4	-	-	0.45	0.08	-	1.96	-	1.02	0.2	<0.02	<0.02	0.28	2.76	<0.02
	0021_MW107	03 Apr 2025	0021_MW107_250403	ES2510113	1.53	1.59	0.09	4.07	3.12	3.84	-	-	0.10	<0.02	-	0.07	-	0.12	<0.1	<0.02	<0.02	0.05	0.37	<0.02
			0021_QC156_250403	ES2510113	1.86	1.42	0.11	4.19	3.28	3.98	-	-	0.09	<0.02	-	0.06	-	0.11	<0.1	<0.02	<0.02	0.04	0.34	<0.02
	0021_MW110	01 Apr 2025	0021_MW110_250401	ES2510113	<0.01	0.08	<0.01	0.08	0.08	0.08	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
	0021_MW111	08 Apr 2025	0021_MW111_250408	ES2510113	0.02	0.02	<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
	0021_MW150	04 Apr 2025	0021_MW150_250404	ES2510113	19.9	3.60	0.36	25.4	23.5	24.4	-	-	0.10	<0.02	-	0.70	-	0.22	<0.1	<0.02	<0.02	0.05	0.36	<0.02
	0021_MW151	04 Apr 2025	0021_MW151_250404	ES2510113	9.40	8.58	0.40	21.4	18.0	19.8	-	-	0.45	<0.02	-	0.55	-	0.84	<0.1	<0.02	<0.02	0.12	0.70	<0.02
	0021_MW152	08 Apr 2025	0021_MW152_250408	ES2510113	27.4	10.4	0.70	42.2	37.8	40.0	-	-	0.37	<0.02	-	1.35	-	0.75	<0.1	<0.02	<0.02	0.13	0.79	<0.02
	0021_MW153	04 Apr 2025	0021_MW153_250404	ES2510113	16.1	8.84	0.58	28.9	24.9	27.1	-	-	0.39	<0.02	-	0.91	-	0.70	<0.1	<0.02	<0.02	0.15	0.86	<0.02
			0021_QC140_250404	ES2510113	18.5	6.36	0.71	28.6	24.9	27.0	-	-	0.37	<0.02	-	0.81	-	0.60	<0.1	<0.02	<0.02	0.12	0.78	<0.02
			0021_QC240_250404	1210052	18	7.6	0.57	29.59	25.6	27.88	18.57	26.17	0.42	<0.01	0.02	0.92	0.16	0.61	0.10	<0.01	<0.01	0.15	0.87	<0.01
	0021_MW154	04 Apr 2025	0021_MW154_250404	ES2510113	20.2	35.9	2.04	85.0	56.1	73.8	-	-	6.14	<0.02	-	2.07	-	5.88	0.8	<0.02	<0.02	0.98	6.40	<0.02
	0021_MW155	04 Apr 2025	0021_MW155_250404	ES2510113	31.5	29.4	2.64	87.5	60.9	79.2	-	-	3.45	0.32	-	0.90	-	3.78	0.7	0.60	<0.02	1.05	8.63	0.50
	0021_SW003	03 Apr 2025	0021_SW003_250403	ES2510622	0.08	0.04	<0.01	0.12	0.12	0.12	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
	0021_SW004	02 Apr 2025	0021_SW004_250402	ES2510622	<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
	0021_SW005	02 Apr 2025	0021_SW005_250402	ES2510622	0.03	0.03	<0.01	0.06	0.06	0.06	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
	0021_SW006	02 Apr 2025	0021_SW006_250402	ES2510622	<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
	0021_SW012	31 Mar 2025	0021_SW012_250331	ES2510622	1.29	0.67	0.02	2.15	1.96	2.08	-	-	0.02	<0.02	-	0.03	-	0.04	<0.1	<0.02	<0.02	<0.02	0.08	<0.02
	0021_SW110	03 Apr 2025	0021_SW110_250403	ES2510623	0.31	0.29	0.01	0.70	0.60	0.68	-	-	<0.02	<0.02	-	<0.02	-	0.02	<0.1	<0.02	<0.02	<0.02	0.07	<0.02
	0021_SW112	03 Apr 2025	0021_SW112_250403	ES2510623	0.07	0.08	<0.01	0.15	0.15	0.15	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
	0021_SW127	01 Apr 2025	0021_SW127_250401	ES2510623	2.06	1.33	0.04	3.78	3.39	3.63	-	-	0.05	<0.02	-	0.06	-	0.09	<0.1	<0.02	<0.02	<0.02	0.15	<0.02
	0021_SW130	03 Apr 2025	0021_SW130_250403	ES2510623	1.43	1.00	0.04	2.99	2.43	2.87	-	-	0.06	<0.02	-	0.04	-	0.08	<0.1	<0.02	<0.02	0.03	0.25	<0.02
	0021_SW153	31 Mar 2025	0021_QC102_250331	ES2510113	1.36	0.68	0.02	2.24	2.04	2.17	-	-	0.03	<0.02	-	0.03	-	0.04	<0.1	<0.02	<0.02	<0.02	0.08	<0.02
			0021_QC202_250331	1210052	1.7	0.74	0.03	2.72	2.44	2.63	1.73	2.47	0.04	<0.01	<0.01	0.04	<0.01	0.05	<0.05	<0.01	<0.01	<0.01	0.10	<0.01
			0021_SW153_250331	ES2510623	1.16	0.69	0.02	2.07	1.85	2.00	-	-	0.03	<0.02	-	0.03	-	0.04	<0.1	<0.02	<0.02	<0.02	0.08	<0.02
Pathway	0021_MW021	01 Apr 2025	0021_MW021_250401	ES2510113	<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
	0021_MW060	01 Apr 2025	0021_MW060_250401	ES2510113	0.03	<0.01	<0.01	0.03	0.03	0.03	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
	0021_MW070	07 Apr 2025	0021_MW070_250407	ES2510113	40.4	5.92	0.30	48.4	46.3	47.3	-	-	0.11	<0.02	-	0.71	-	0.27	<0.1	<0.02	<0.02	0.08	0.40	<0.02
	0021_MW071	07 Apr 2025	0021_MW071_250407	ES2510113	0.50	2.12	0.09	3.93	2.62	3.45	-	-	0.23	<0.02	-	0.07	-	0.31	<0.1	<0.02	<0.02	0.06	0.37	<0.02
	0021_MW072	07 Apr 2025	0021_MW072_250407	ES2510113	18.1	7.35	0.52	28.3	25.4	27.0	-	-	0.23	<0.02	-	0.80	-	0.43	<0.1	<0.02	<0.02	0.11	0.56	<0.02
	0021_MW112	01 Apr 2025	0021_MW112_250401	ES2510113	<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
			0021_QC154_250401	ES2510113	<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
	0021_MW113	07 Apr 2025	0021_MW113_250407	ES2510113	0.04	<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
	0021_MW133	02 Apr 2025	0021_MW133_250402	ES2510113	<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
	0021_SW010	04 Apr 2025	0021_SW010_250404	ES2510622	4.77	2.17	0.10	7.62	6.94	7.36	-	-	0.07	<0.02	-	0.12	-	0.12	<0.1	<0.02	<0.02	0.02	0.19	<0.02
	0021_SW018	02 Apr 2025	0021_SW018_250402	ES2510622	0.03	0.13	<0.01	0.16	0.16	0.16	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
	0021_SW044	01 Apr 2025	0021_SW044_250401	ES2510622	1.02	0.62	0.02	1.76	1.64	1.69	-	-	<0.02	<0.02	-	0.03	-	0.04	<0.1	<0.02	<0.02	<0.02	0.03	<0.02
	0021_SW045	01 Apr 2025	0021_SW045_250401	ES2510622	0.02	0.02	<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
	0021_SW048	03 Apr 2025	0021_SW048_250403	ES2510622	0.01	0.03	<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
	0021_SW053	01 Apr 2025	0021_SW053_250401	ES2510622	1.29	0.85	0.03	2.32	2.14	2.23	-	-	0.02	<0.02	-	0.05	-	0.04	<0.1	<0.02	<0.02	<0.02	0.04	<0.02
Receptor	0021_SW043	01 Apr 2025	0021_SW043_250401	ES2510622	0.99	0.59	0.02	1.69	1.58	1.63	-	-	<0.02	<0.02	-	0.03	-	0.03	<0.1	<0.02	<0.02	<0.02	0.03	<0.02
	0021_SW051	03 Apr 2025	0021_SW051_250403	ES2510622	<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
	0021_SW052	01 Apr 2025	0021_SW052_250401	ES2510622	1.04	0.57	0.02	1.74	1.61	1.68	-	-	0.02	<0.02	-	0.03	-	0.03	<0.1	<0.02	<0.02	<0.02	0.03	<0.02
	0021_SW211	03 Apr 2025	0021_SW211_250403	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	<0.02	<0.02	<0.02	<0.02

	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)	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)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.05	0.01	0.01	0.01	0.01	0.01
PFAS NEMP 2025 Freshwater and Interim Marine 95%	0.13[#1]		220[#1]																	
PFAS NEMP 2025 Recreational water quality	2[#2]	2[#2]	10[#2]		2[#2]															
Statistics																				
Number of Results	54	54	54	54	54	54	3	3	54	54	3	54	3	54	54	54	54	54	54	54
Number of Detects	44	43	31	45	45	45	3	3	28	2	2	29	2	32	4	1	0	19	32	1
Minimum Concentration	0.01	<0.01	0.01	<0.01	<0.01	<0.01	1.73	2.47	0.02	<0.01	<0.01	<0.02	<0.01	0.02	<0.05	<0.01	<0.01	<0.01	<0.02	<0.01
Minimum Detect	0.01	0.02	0.01	0.03	0.03	0.03	1.73	2.47	0.02	0.08	0.02	0.03	0.02	0.02	0.1	0.6	ND	0.02	0.03	0.5
Maximum Concentration	62.8	35.9	2.64	88.9	80.4	85.4	21.09	26.17	6.14	0.32	0.27	2.07	0.16	5.88	0.8	0.6	<0.02	1.05	8.63	0.5
Maximum Detect	62.8	35.9	2.64	88.9	80.4	85.4	21.09	26.17	6.14	0.32	0.27	2.07	0.16	5.88	0.8	0.6	ND	1.05	8.63	0.5
Average Concentration *	6.7	3.2	0.2	12	9.8	11	14	18	0.26	0.017	0.098	0.25	0.062	0.32	0.079	0.021	0.0097	0.072	0.5	0.019
Geometric Average *	0.42	0.29	0.029	0.76	0.69	0.74	8.8	12	0.04	0.011	0.03	0.046	0.025	0.053	0.056	0.01	0.0096	0.022	0.071	0.01
Median Concentration *	1.005	0.605	0.02	1.75	1.625	1.685	18.57	25.29	0.02	0.01	0.02	0.03	0.02	0.04	0.05	0.01	0.01	0.01	0.075	0.01
Standard Deviation *	12	6.8	0.48	22	18	20	11	13	0.94	0.043	0.15	0.47	0.085	0.95	0.14	0.08	0.0012	0.19	1.5	0.067
Geometric Standard Deviation *	22	16	6.9	24	23	24	4.1	3.9	5.2	1.8	7.6	6	5.7	5.9	1.8	1.8	1.2	3.5	7.2	1.8
95% UCL (Student's-t) *	9.506	4.7	0.308	16.75	13.88	15.64	31.54	40.63	0.478	0.0266	0.349	0.354	0.206	0.537	0.109	0.039	0.00999	0.117	0.839	0.034
Number of Env Standard Exceedances	33	16	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Env Standard Exceedances (Detects Only)	33	16	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Detects	81	80	57	83	83	83	100	100	52	4	67	54	67	59	7	2	0	35	59	2
% of Non-Detects	19	20	43	17	17	17	0	0	48	96	33	46	33	41	93	98	100	65	41	98
% of Detects at or above Env Standards	61	30	0	0	44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Results Below Env Standards or Non-Detect	39	70	100	100	56	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 Refer to Table 8 in PFAS NEMP 2025 for comments and notes
#2 Refer to Table 4 in PFAS NEMP 3.0 (2025) for comments and notes

Environmental Standards

HEPA, March 2025, PFAS NEMP 2025 Freshwater and Interim Marine 95%
HEPA, March 2025, PFAS NEMP 2025 Recreational water quality

					Acids				PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	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 (FOSA)	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	0.05	0.02	0.05	0.05	0.02	0.05	0.02	0.01	0.05	0.01	0.01
PFAS NEMP 2025 Freshwater and Interim Marine 95%																			
PFAS NEMP 2025 Recreational water quality																			
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**															
Source	0021_MW024	01 Apr 2025	0021_MW024_250401	ES2510113	<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
	0021_MW061	24 Apr 2025	0021_MW061_250424	ES2512435	<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
	0021_MW063	03 Apr 2025	0021_MW063_250403	ES2510113	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
	0021_MW064	03 Apr 2025	0021_MW064_250403	ES2510113	0.03	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	0021_MW065	03 Apr 2025	0021_MW065_250403	ES2510113	0.06	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	0021_MW101	04 Apr 2025	0021_MW101_250404	ES2510113	<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
	0021_MW103	03 Apr 2025	0021_MW103_250403	ES2510113	0.12	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	0021_MW104	03 Apr 2025	0021_MW104_250403	ES2510113	<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
	0021_MW105	03 Apr 2025	0021_MW105_250403	ES2510113	0.03	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			0021_QC256_250403	1210052	0.04	<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
	0021_MW106	04 Apr 2025	0021_MW106_250404	ES2510113	0.47	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	0021_MW107	03 Apr 2025	0021_MW107_250403	ES2510113	0.11	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			0021_QC156_250403	ES2510113	0.12	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	0021_MW110	01 Apr 2025	0021_MW110_250401	ES2510113	<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
	0021_MW111	08 Apr 2025	0021_MW111_250408	ES2510113	<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
	0021_MW150	04 Apr 2025	0021_MW150_250404	ES2510113	0.07	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	0021_MW151	04 Apr 2025	0021_MW151_250404	ES2510113	0.15	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	0021_MW152	08 Apr 2025	0021_MW152_250408	ES2510113	0.16	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	0021_MW153	04 Apr 2025	0021_MW153_250404	ES2510113	0.17	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			0021_QC140_250404	ES2510113	0.18	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			0021_QC240_250404	1210052	0.17	<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
	0021_MW154	04 Apr 2025	0021_MW154_250404	ES2510113	1.30	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	0021_MW155	04 Apr 2025	0021_MW155_250404	ES2510113	1.78	<0.05	<0.02	0.05	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	0021_SW003	03 Apr 2025	0021_SW003_250403	ES2510622	<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
	0021_SW004	02 Apr 2025	0021_SW004_250402	ES2510622	<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
	0021_SW005	02 Apr 2025	0021_SW005_250402	ES2510622	<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
	0021_SW006	02 Apr 2025	0021_SW006_250402	ES2510622	<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
	0021_SW012	31 Mar 2025	0021_SW012_250331	ES2510622	<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
	0021_SW110	03 Apr 2025	0021_SW110_250403	ES2510623	<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
	0021_SW112	03 Apr 2025	0021_SW112_250403	ES2510623	<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
	0021_SW127	01 Apr 2025	0021_SW127_250401	ES2510623	<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
	0021_SW130	03 Apr 2025	0021_SW130_250403	ES2510623	0.06	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	0021_SW153	31 Mar 2025	0021_QC102_250331	ES2510113	<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
			0021_QC202_250331	1210052	0.02	<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
			0021_SW153_250331	ES2510623	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
Pathway	0021_MW021	01 Apr 2025	0021_MW021_250401	ES2510113	<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
	0021_MW060	01 Apr 2025	0021_MW060_250401	ES2510113	<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
	0021_MW070	07 Apr 2025	0021_MW070_250407	ES2510113	0.07	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	0021_MW071	07 Apr 2025	0021_MW071_250407	ES2510113	0.08	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	0021_MW072	07 Apr 2025	0021_MW072_250407	ES2510113	0.09	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	0021_MW112	01 Apr 2025	0021_MW112_250401	ES2510113	<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
			0021_QC154_250401	ES2510113	<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
	0021_MW113	07 Apr 2025	0021_MW113_250407	ES2510113	<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
	0021_MW133	02 Apr 2025	0021_MW133_250402	ES2510113	<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
	0021_SW010	04 Apr 2025	0021_SW010_250404	ES2510622	0.04	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	0021_SW018	02 Apr 2025	0021_SW018_250402	ES2510622	<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
	0021_SW044	01 Apr 2025	0021_SW044_250401	ES2510622	<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
	0021_SW045	01 Apr 2025	0021_SW045_250401	ES2510622	<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
	0021_SW048	03 Apr 2025	0021_SW048_250403	ES2510622	<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
	0021_SW053	01 Apr 2025	0021_SW053_250401	ES2510622	<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
Receptor	0021_SW043	01 Apr 2025	0021_SW043_250401	ES2510622	<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
	0021_SW051	03 Apr 2025	0021_SW051_250403	ES2510622	<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
	0021_SW052	01 Apr 2025	0021_SW052_250401	ES2510622	<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
	0021_SW211	03 Apr 2025	0021_SW211_250403	ES2510623	<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

	Acids				PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	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 (FOSA)	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	0.05	0.02	0.05	0.05	0.02	0.05	0.02	0.01	0.05	0.01	0.01
PFAS NEMP 2025 Freshwater and Interim Marine 95%															
PFAS NEMP 2025 Recreational water quality															

Statistics

Number of Results	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54
Number of Detects	24	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	0.02	<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	0.02	ND	ND	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	1.78	<0.05	<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	1.78	ND	ND	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *	0.1	0.024	0.0097	0.01	0.025	0.011	0.025	0.025	0.011	0.025	0.011	0.024	0.025	0.024	0.024
Geometric Average *	0.027	0.023	0.0096	0.0099	0.025	0.011	0.025	0.025	0.011	0.025	0.011	0.023	0.025	0.023	0.023
Median Concentration *	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 *	0.3	0.0046	0.0012	0.0056	0	0.0035	0	0	0.0035	0	0.0035	0.0046	0	0.0046	0.0046
Geometric Standard Deviation *	3.9	1.5	1.2	1.3	1	1.2	1	1	1.2	1	1.2	1.5	1	1.5	1.5
95% UCL (Student's-t) *	0.173	0.0249	0.00999	0.0117	0.025	0.0116	0.025	0.025	0.0116	0.025	0.0116	0.0249	0.025	0.0249	0.0249
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	44	0	0	2	0	0	0	0	0	0	0	0	0	0	0
% of Non-Detects	56	100	100	98	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 Refer to Table 8 in PFAS NEMP 2025 for comments and notes
#2 Refer to Table 4 in PFAS NEMP 3.0 (2025) for comments and notes

Environmental Standards

HEPA, March 2025, PFAS NEMP 2025 Freshwater and Interim Marine 95%
HEPA, March 2025, PFAS NEMP 2025 Recreational water quality

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids						PFAS			
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL					0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.05	0.01	0.01	0.01
PFAS NEMP 2025 Freshwater and Interim Marine 95%					0.13		220															
PFAS NEMP 2025 Recreational water quality					2	2	10	2														
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																		
Pathway	0021_MW022	01 Apr 2025	0021_MW022_250401	ES2510113	0.72	0.73	0.04	1.45	1.62	1.53	-	-	<0.02	<0.02	-	0.06	-	0.03	<0.1	<0.02	<0.02	<0.02
	0021_MW131	01 Apr 2025	0021_MW131_250401	ES2510113	0.05	0.04	<0.01	0.09	0.09	0.09	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
			0021_QC134_250401	ES2510113	0.16	0.16	0.02	0.32	0.34	0.34	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02
			0021_QC234_250401	1210052	0.05	0.04	<0.01	0.09	0.1	0.1	0.05	0.09	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01
	0021_MW132	01 Apr 2025	0021_MW132_250401	ES2510113	<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
	0021_SW057	01 Apr 2025	0021_SW057_250401	ES2510622	<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
	0021_SW058	01 Apr 2025	0021_SW058_250401	ES2510622	<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
	0021_SW059	04 Apr 2025	0021_SW059_250404	ES2510622	<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
Receptor	0021_SW056	01 Apr 2025	0021_SW056_250401	ES2510622	<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
	0021_SW085	01 Apr 2025	0021_SW085_250401	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	<0.02	<0.02
	0021_SW188	03 Apr 2025	0021_SW188_250403	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	<0.02	<0.02
Statistics																						
Number of Results					11	11	11	11	11	11	1	1	11	11	1	11	1	11	11	11	11	11
Number of Detects					4	5	2	5	5	5	1	1	0	0	0	1	0	1	0	0	0	0
Minimum Concentration					<0.01	0.01	<0.01	0.01	0.01	0.01	0.05	0.09	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01
Minimum Detect					0.05	0.01	0.02	0.01	0.01	0.01	0.05	0.09	ND	ND	ND	0.06	ND	0.03	ND	ND	ND	ND
Maximum Concentration					0.72	0.73	0.04	1.45	1.62	1.53	0.05	0.09	<0.02	<0.02	<0.01	0.06	<0.01	0.03	<0.1	<0.02	<0.02	<0.02
Maximum Detect					0.72	0.73	0.04	1.45	1.62	1.53	0.05	0.09	ND	ND	ND	0.06	ND	0.03	ND	ND	ND	ND
Average Concentration *					0.092	0.092	0.0095	0.18	0.2	0.19			0.0095	0.0095		0.014		0.011	0.048	0.0095	0.0095	0.0095
Geometric Average *					0.016	0.017	0.0069	0.022	0.023	0.022	0.05	0.09	0.0094	0.0094	0.005	0.011	0.005	0.01	0.047	0.0094	0.0094	0.0094
Median Concentration *					0.005	0.005	0.005	0.005	0.005	0.005	0.05	0.09	0.01	0.01	0.005	0.01	0.005	0.01	0.05	0.01	0.01	0.01
Standard Deviation *					0.21	0.22	0.011	0.43	0.48	0.46			0.0015	0.0015		0.015		0.0064	0.0075	0.0015	0.0015	0.0015
Geometric Standard Deviation *					6	5.6	2.1	7.9	8.2	8.1			1.2	1.2		1.8		1.5	1.2	1.2	1.2	1.2
95% UCL (Student's-t) *					0.209	0.21	0.0156	0.417	0.462	0.44			0.0104	0.0104		0.0225		0.0148	0.0518	0.0104	0.0104	0.0104
Number of Env Standard Exceedances					2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Env Standard Exceedances (Detects Only)					2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Detects					36	45	18	45	45	45	100	100	0	0	0	9	0	9	0	0	0	0
% of Non-Detects					64	55	82	55	55	55	0	0	100	100	100	91	100	91	100	100	100	100
% of Detects at or above Env Standards					18	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					82	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.

Environmental Standards

HEPA, March 2025, PFAS NEMP 2025 Freshwater and Interim Marine 95%
HEPA, March 2025, PFAS NEMP 2025 Recreational water quality

					- Perfluoroalkyl Carboxylic Acids						PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 FTS)
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL					0.01	0.01	0.01	0.01	0.01	0.01	0.05	0.02	0.05	0.05	0.02	0.05	0.02	0.01	0.01	0.05	0.01
PFAS NEMP 2025 Freshwater and Interim Marine 95%																					
PFAS NEMP 2025 Recreational water quality																					
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																	
Pathway	0021_MW022	01 Apr 2025	0021_MW022_250401	ES2510113	0.04	<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
	0021_MW131	01 Apr 2025	0021_MW131_250401	ES2510113	<0.02	<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
			0021_QC134_250401	ES2510113	<0.02	<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
			0021_QC234_250401	1210052	0.01	<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	<0.01	<0.05	<0.01
	0021_MW132	01 Apr 2025	0021_MW132_250401	ES2510113	<0.02	<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
	0021_SW057	01 Apr 2025	0021_SW057_250401	ES2510622	<0.02	<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
	0021_SW058	01 Apr 2025	0021_SW058_250401	ES2510622	<0.02	<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
	0021_SW059	04 Apr 2025	0021_SW059_250404	ES2510622	<0.02	<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
Receptor	0021_SW056	01 Apr 2025	0021_SW056_250401	ES2510622	<0.02	<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
	0021_SW085	01 Apr 2025	0021_SW085_250401	ES2510623	<0.02	<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
	0021_SW188	03 Apr 2025	0021_SW188_250403	ES2510623	<0.02	<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					11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
Number of Detects					2	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	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.01	<0.01	<0.05	<0.01
Minimum Detect					0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration					0.04	<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					0.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *					0.013	0.0095	0.0095	0.023	0.0095	0.0095	0.025	0.011	0.025	0.025	0.011	0.025	0.011	0.023	0.023	0.025	0.023
Geometric Average *					0.011	0.0094	0.0094	0.022	0.0094	0.0094	0.025	0.011	0.025	0.025	0.011	0.025	0.011	0.022	0.022	0.025	0.022
Median Concentration *					0.01	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 *					0.009	0.0015	0.0015	0.006	0.0015	0.0015	0	0.0045	0	0	0.0045	0	0.0045	0.006	0.006	0	0.006
Geometric Standard Deviation *					1.5	1.2	1.2	1.6	1.2	1.2	1	1.3	1	1	1.3	1	1.3	1.6	1.6	1	1.6
95% UCL (Student's-t) *					0.0177	0.0104	0.0104	0.0265	0.0104	0.0104	0.025	0.0138	0.025	0.025	0.0138	0.025	0.0138	0.0265	0.0265	0.025	0.0265
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					18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Non-Detects					82	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.

Environmental Standards

HEPA, March 2025, PFAS NEMP 2025 Freshwater and Interim Marine 95%
HEPA, March 2025, PFAS NEMP 2025 Recreational water quality

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids						PFAS - Perfluoroalk				
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	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	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	0.01	0.01	0.05	0.01	0.01	0.01	0.01
0020_0021_Human health consumption of biota					**0.01**	**0.01**		**0.01**															
PFAS NEMP 2025 Freshwater and Marine 95%					0.13		220																
PFAS NEMP 2025 Recreational water quality					2	2	10	2															
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																			
Pathway	0021_SW062	02 Apr 2025	0021_SW062_250402	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	<0.02	<0.02	<0.02
	0021_SW064	02 Apr 2025	0021_QC136_250402	ES2510113	<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
			0021_QC236_250402	1210052	<0.01	<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	<0.05	<0.01	<0.01	<0.01	<0.01
			0021_SW064_250402	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	<0.02	<0.02	<0.02
Receptor	0021_SW060	01 Apr 2025	0021_SW060_250401	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	<0.02	<0.02	<0.02
	0021_SW068	01 Apr 2025	0021_QC103_250401	ES2510113	**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
			0021_QC203_250401	1210052	<0.01	<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	<0.05	<0.01	<0.01	<0.01	<0.01
			0021_SW068_250401	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	<0.02	<0.02	<0.02
	0021_SW069	01 Apr 2025	0021_SW069_250401	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	<0.02	<0.02	<0.02
Statistics																							
Number of Results					9	9	9	9	9	9	2	2	9	9	2	9	2	9	9	9	9	9	9
Number of Detects					1	0	0	1	1	1	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	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01
Minimum Detect					0.01	ND	ND	0.01	0.01	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration					0.01	<0.01	<0.01	0.01	<0.1	<0.05	<0.01	<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					0.01	ND	ND	0.01	0.01	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *					0.0056	0.005	0.005	0.0056	0.016	0.01	0.005	0.005	0.0089	0.0089	0.005	0.0089	0.005	0.0089	0.044	0.0089	0.0089	0.0089	0.0089
Geometric Average *					0.0054	0.005	0.005	0.0054	0.009	0.0077	0.005	0.005	0.0086	0.0086	0.005	0.0086	0.005	0.0086	0.043	0.0086	0.0086	0.0086	0.0086
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	0.005	0.01	0.05	0.01	0.01	0.01	0.01
Standard Deviation *					0.0017	0	0	0.0017	0.02	0.0087	0	0	0.0022	0.0022	0	0.0022	0	0.0022	0.011	0.0022	0.0022	0.0022	0.0022
Geometric Standard Deviation *					1.3	1	1	1.3	2.7	2	1	1	1.4	1.4	1	1.4	1	1.4	1.4	1.4	1.4	1.4	1.4
95% UCL (Student's-t) *					0.00659	0.005	0.005	0.00659	0.0277	0.0154	0.005	0.005	0.0103	0.0103	0.005	0.0103	0.005	0.0103	0.0513	0.0103	0.0103	0.0103	0.0103
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					11	0	0	11	11	11	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Non-Detects					89	100	100	89	89	89	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.

Environmental Standards

HEPA, March 2025, PFAS NEMP 2025 Freshwater and Marine 95%
HEPA, March 2025, PFAS NEMP 2025 Recreational water quality
JBRF/HMAS Creswell OMP Site Specific Criteria

					yl Carboxylic Acids					PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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	0.01	0.05	0.01
0020_0021_Human health consumption of biota																				
PFAS NEMP 2025 Freshwater and Marine 95%																				
PFAS NEMP 2025 Recreational water quality																				
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																
Pathway	0021_SW062	02 Apr 2025	0021_SW062_250402	ES2510623	<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
	0021_SW064	02 Apr 2025	0021_QC136_250402	ES2510113	<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
			0021_QC236_250402	1210052	<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	<0.01	<0.05	<0.01
			0021_SW064_250402	ES2510623	<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
Receptor	0021_SW060	01 Apr 2025	0021_SW060_250401	ES2510623	<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
	0021_SW068	01 Apr 2025	0021_QC103_250401	ES2510113	<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
			0021_QC203_250401	1210052	<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	<0.01	<0.05	<0.01
			0021_SW068_250401	ES2510623	<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
	0021_SW069	01 Apr 2025	0021_SW069_250401	ES2510623	<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					9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
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	<0.01	<0.05	<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 *					0.0089	0.0089	0.021	0.0089	0.0089	0.025	0.013	0.025	0.025	0.013	0.025	0.013	0.021	0.021	0.025	0.021
Geometric Average *					0.0086	0.0086	0.017	0.0086	0.0086	0.025	0.012	0.025	0.025	0.012	0.025	0.012	0.017	0.017	0.025	0.017
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 *					0.0022	0.0022	0.0088	0.0022	0.0022	0	0.0066	0	0	0.0066	0	0.0066	0.0088	0.0088	0	0.0088
Geometric Standard Deviation *					1.4	1.4	2	1.4	1.4	1	1.5	1	1	1.5	1	1.5	2	2	1	2
95% UCL (Student's-t) *					0.0103	0.0103	0.026	0.0103	0.0103	0.025	0.0174	0.025	0.025	0.0174	0.025	0.0174	0.026	0.026	0.025	0.026
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.

Environmental Standards

HEPA, March 2025, PFAS NEMP 2025 Freshwater and Marine 95%
HEPA, March 2025, PFAS NEMP 2025 Recreational water quality
JBRF/HMAS Creswell OMP Site Specific Criteria

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids						PFAS - Perfluoroalk				
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	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	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	0.01	0.01	0.05	0.01	0.01	0.01	0.01
0020_0021_Activity specific HHRA EPC for RAN SSSS					39.7	39.7		39.7															
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																			
Tank	0021_OTH001	07 Apr 2025	0021_OTH001_250407	ES2510113	0.06	0.02	<0.01	0.08	0.08	0.08	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02
			0021_QC157_250407	ES2510113	0.06	0.01	<0.01	0.07	0.07	0.07	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02
			0021_QC257_250407	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	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01
	0021_OTH002	07 Apr 2025	0021_OTH002_250407	ES2510113	0.61	0.25	0.06	0.86	1.27	1.22	-	-	0.02	<0.02	-	<0.02	-	0.03	<0.1	0.02	<0.02	0.02	0.22
	0021_OTH003	07 Apr 2025	0021_OTH003_250407	ES2510113	3.15	1.35	0.10	4.50	6.35	6.07	-	-	0.11	<0.02	-	0.11	-	0.13	<0.1	<0.02	<0.02	0.07	0.41
	0021_OTH005	07 Apr 2025	0021_OTH005_250407	ES2510113	0.11	0.02	<0.01	0.13	0.13	0.13	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02
	0021_OTH006	07 Apr 2025	0021_OTH006_250407	ES2510113	<0.01	<0.01	<0.01	<0.01	0.02	0.02	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	0.02
Statistics																							
Number of Results					7	7	7	7	7	7	1	1	7	7	1	7	1	7	7	7	7	7	7
Number of Detects					6	6	2	6	7	7	1	1	2	0	0	1	0	2	0	1	0	2	3
Minimum Concentration					<0.01	0.01	<0.01	<0.01	0.02	0.02	0.06	0.11	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01
Minimum Detect					0.06	0.01	0.06	0.07	0.02	0.02	0.06	0.11	0.02	ND	ND	0.11	ND	0.03	ND	0.02	ND	0.02	0.02
Maximum Concentration					3.15	1.35	0.1	4.5	6.35	6.07	0.06	0.11	0.11	<0.02	<0.01	0.11	<0.01	0.13	<0.1	0.02	<0.02	0.07	0.41
Maximum Detect					3.15	1.35	0.1	4.5	6.35	6.07	0.06	0.11	0.11	ND	ND	0.11	ND	0.13	ND	0.02	ND	0.07	0.41
Average Concentration *					0.58	0.24	0.026	0.82	1.1	1.1			0.025	0.0093		0.024		0.029	0.046	0.011	0.0093	0.019	0.098
Geometric Average *					0.11	0.044	0.011	0.15	0.2	0.2	0.06	0.11	0.014	0.0091	0.005	0.013	0.005	0.015	0.045	0.01	0.0091	0.013	0.026
Median Concentration *					0.06	0.02	0.005	0.11	0.11	0.11	0.06	0.11	0.01	0.01	0.005	0.01	0.005	0.01	0.05	0.01	0.01	0.01	0.01
Standard Deviation *					1.2	0.5	0.038	1.6	2.3	2.2			0.038	0.0019		0.038		0.045	0.0094	0.0045	0.0019	0.023	0.16
Geometric Standard Deviation *					7.7	7.1	3.8	8.4	7.1	7			2.7	1.3		2.7		2.9	1.3	1.5	1.3	2.3	5.6
95% UCL (Student's-t) *					1.426	0.607	0.0546	2.033	2.863	2.74			0.0527	0.0107		0.0516		0.0624	0.0534	0.014	0.0107	0.036	0.214
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					86	86	29	86	100	100	100	100	29	0	0	14	0	29	0	14	0	29	43
% of Non-Detects					14	14	71	14	0	0	0	0	71	100	100	86	100	71	100	86	100	71	57
% 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.

Environmental Standards

JBRF/HMAS Creswell OMP Site Specific Criteria

					yl Carboxylic Acids					PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 FTS)
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL					0.01	0.01	0.01	0.01	0.01	0.05	0.02	0.05	0.05	0.02	0.05	0.02	0.01	0.01	0.05	0.01
0020_0021_Activity specific HHRA EPC for RAN SSSS																				
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																
Tank	0021_OTH001	07 Apr 2025	0021_OTH001_250407	ES2510113	<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
			0021_QC157_250407	ES2510113	<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
			0021_QC257_250407	1210052	<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	<0.01	<0.05	<0.01
	0021_OTH002	07 Apr 2025	0021_OTH002_250407	ES2510113	<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	<0.05
	0021_OTH003	07 Apr 2025	0021_OTH003_250407	ES2510113	<0.02	0.19	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	0.69	<0.05
	0021_OTH005	07 Apr 2025	0021_OTH005_250407	ES2510113	<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
	0021_OTH006	07 Apr 2025	0021_OTH006_250407	ES2510113	<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					7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Number of Detects					0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	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	<0.01	<0.05	<0.01
Minimum Detect					ND	0.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.69	ND
Maximum Concentration					<0.02	0.19	<0.05	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.69	<0.05
Maximum Detect					ND	0.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.69	ND
Average Concentration *					0.0093	0.039	0.022	0.0093	0.0093	0.025	0.012	0.025	0.025	0.012	0.025	0.012	0.022	0.022	0.12	0.022
Geometric Average *					0.0091	0.017	0.02	0.0091	0.0091	0.025	0.011	0.025	0.025	0.011	0.025	0.011	0.02	0.02	0.04	0.02
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 *					0.0019	0.067	0.0076	0.0019	0.0019	0	0.0057	0	0	0.0057	0	0.0057	0.0076	0.0076	0.25	0.0076
Geometric Standard Deviation *					1.3	3.4	1.8	1.3	1.3	1	1.4	1	1	1.4	1	1.4	1.8	1.8	3.5	1.8
95% UCL (Student's-t) *					0.0107	0.0888	0.0277	0.0107	0.0107	0.025	0.0163	0.025	0.025	0.0163	0.025	0.0163	0.0277	0.0277	0.305	0.0277
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	29	0	0	0	0	0	0	0	0	0	0	0	0	14	0
% of Non-Detects					100	71	100	100	100	100	100	100	100	100	100	100	100	100	86	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.

Environmental Standards

JBRF/HMAS Creswell OMP Site Specific Criteria

					PFAS			PFAS - Sums			PFAS - Perfluoroalkyl Sulfonic Acids				PFAS - Perfluoroalkyl Carboxylic					
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)
					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
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																
STP	0020_SW035	31 Mar 2025	0020_SW035_250331	ES2510618	0.42	0.29	0.01	0.71	0.77	0.75	<0.02	<0.02	<0.02	0.02	<0.1	<0.02	<0.02	<0.02	0.03	<0.02
	0020_SW036	31 Mar 2025	0020_SW036_250331	ES2510618	0.10	0.20	<0.01	0.30	0.32	0.32	0.02	<0.02	<0.02	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
	0020_SW037	31 Mar 2025	0020_SW037_250331	ES2510618	0.31	0.18	<0.01	0.49	0.49	0.49	<0.02	<0.02	<0.02	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Statistics																				
Number of Results					3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Number of Detects					3	3	1	3	3	3	1	0	0	1	0	0	0	0	1	0
Minimum Concentration					0.1	0.18	0.01	0.3	0.32	0.32	0.02	<0.02	<0.02	0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Minimum Detect					0.1	0.18	0.01	0.3	0.32	0.32	0.02	ND	ND	0.02	ND	ND	ND	ND	0.03	ND
Maximum Concentration					0.42	0.29	0.01	0.71	0.77	0.75	0.02	<0.02	<0.02	0.02	<0.1	<0.02	<0.02	<0.02	0.03	<0.02
Maximum Detect					0.42	0.29	0.01	0.71	0.77	0.75	0.02	ND	ND	0.02	ND	ND	ND	ND	0.03	ND
Average Concentration *					0.28	0.22	0.0067	0.5	0.53	0.52	0.013	0.01	0.01	0.013	0.05	0.01	0.01	0.01	0.017	0.01
Geometric Average *					0.24	0.22	0.0063	0.47	0.49	0.49	0.013	0.01	0.01	0.013	0.05	0.01	0.01	0.01	0.014	0.01
Median Concentration *					0.31	0.2	0.005	0.49	0.49	0.49	0.01	0.01	0.01	0.01	0.05	0.01	0.01	0.01	0.01	0.01
Standard Deviation *					0.16	0.059	0.0029	0.21	0.23	0.22	0.0058	0	0	0.0058	0	0	0	0	0.012	0
Geometric Standard Deviation *					2.1	1.3	1.5	1.5	1.6	1.5	1.5	1	1	1.5	1	1	1	1	1.9	1
95% UCL (Student's-t) *					0.551	0.322	0.0115	0.846	0.91	0.885	0.0231	0.01	0.01	0.0231	0.05	0.01	0.01	0.01	0.0361	0.01
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					100	100	33	100	100	100	33	0	0	33	0	0	0	0	33	0
% of Non-Detects					0	0	67	0	0	0	67	100	100	67	100	100	100	100	67	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.

					Acids				PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	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 (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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					0.02	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
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**															
STP	0020_SW035	31 Mar 2025	0020_SW035_250331	ES2510618	<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
	0020_SW036	31 Mar 2025	0020_SW036_250331	ES2510618	<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
	0020_SW037	31 Mar 2025	0020_SW037_250331	ES2510618	<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
Number of Detects					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration					<0.02	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Minimum Detect					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration					<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
Maximum Detect					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *					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
Geometric Average *					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
Median Concentration *					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	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) *					0.01	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
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						PFAS - Perfluoroalk				
					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)	Perfluorononane sulfonate (PFNS)	Perfluorodecanesulfonic acid (PFDS)	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)
					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	mg/kg	mg/kg	mg/kg
EQL					0.0002	0.0002	0.0002	0.0002	0.0002	0.005	0.0002	0.005	0.0002	0.005	0.0002	0.0002	0.005	0.0002	0.001	0.0002	0.0002	0.0002	0.0002
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																			
Receptor	0021_SD073	04 Apr 2025	0021_QC110_250404	ES2510113	<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
			0021_QC210_250404	1210052	<0.005	<0.005	<0.005	<0.05	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
			0021_SD073_250404	ES2510622	<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
Statistics																							
Number of Results					3	3	3	3	3	1	3	1	3	1	3	3	1	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					<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.005	<0.0002	<0.005	<0.0002	<0.005	<0.0002	<0.0002	<0.005	<0.0002	<0.001	<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	ND	ND
Maximum Concentration					<0.005	<0.005	<0.005	<0.05	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<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 *					0.0009	0.0009	0.0009	0.0084	0.0017		0.0009		0.0009		0.0009	0.0009		0.0009	0.0012	0.0009	0.0009	0.0009	0.0009
Geometric Average *					0.00029	0.00029	0.00029	0.00063	0.00037	0.0025	0.00029	0.0025	0.00029	0.0025	0.00029	0.00029	0.0025	0.00029	0.00085	0.00029	0.00029	0.00029	0.00029
Median Concentration *					0.0001	0.0001	0.0001	0.0001	0.0001	0.0025	0.0001	0.0025	0.0001	0.0025	0.0001	0.0001	0.0025	0.0001	0.0005	0.0001	0.0001	0.0001	0.0001
Standard Deviation *					0.0014	0.0014	0.0014	0.014	0.0028		0.0014		0.0014		0.0014	0.0014		0.0014	0.0012	0.0014	0.0014	0.0014	0.0014
Geometric Standard Deviation *					6.4	6.4	6.4	24	9.6		6.4		6.4		6.4	6.4		6.4	2.5	6.4	6.4	6.4	6.4
95% UCL (Student's-t) *					0.00324	0.00324	0.00324	0.0326	0.0065		0.00324		0.00324		0.00324	0.00324		0.00324	0.00311	0.00324	0.00324	0.00324	0.00324
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.

					yl Carboxylic Acids					PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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	0.0002	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
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																
Receptor	0021_SD073	04 Apr 2025	0021_QC110_250404	ES2510113	<0.0002	<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
			0021_QC210_250404	1210052	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
			0021_SD073_250404	ES2510622	<0.0002	<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
Statistics																				
Number of Results					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
Minimum Concentration					<0.0002	<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
Minimum Detect					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration					<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
Maximum Detect					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *					0.0009	0.0009	0.001	0.0009	0.0009	0.001	0.0017	0.001	0.001	0.0017	0.001	0.0009	0.001	0.001	0.0018	0.001
Geometric Average *					0.00029	0.00029	0.00054	0.00029	0.00029	0.00054	0.00037	0.00054	0.00054	0.00037	0.00054	0.00029	0.00054	0.00054	0.00068	0.00054
Median Concentration *					0.0001	0.0001	0.00025	0.0001	0.0001	0.00025	0.0001	0.00025	0.00025	0.0001	0.00025	0.0001	0.00025	0.00025	0.00025	0.00025
Standard Deviation *					0.0014	0.0014	0.0013	0.0014	0.0014	0.0013	0.0028	0.0013	0.0013	0.0028	0.0013	0.0014	0.0013	0.0013	0.0027	0.0013
Geometric Standard Deviation *					6.4	6.4	3.8	6.4	6.4	3.8	9.6	3.8	3.8	9.6	3.8	6.4	3.8	3.8	5.6	3.8
95% UCL (Student's-t) *					0.00324	0.00324	0.00319	0.00324	0.00324	0.00319	0.0065	0.00319	0.00319	0.0065	0.00319	0.00324	0.00319	0.00319	0.00646	0.00319
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 - Perfluoroalk				
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)
					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	mg/kg	mg/kg	mg/kg
EQL					0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.005	0.005	0.0002	0.0002	0.005	0.0002	0.005	0.0002	0.001	0.0002	0.0002	0.0002	0.0002
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																			
Source	0021_SD001	03 Apr 2025	0021_SD001_250403	ES2510622	0.0498	0.0097	0.0002	0.0595	0.0647	0.0605	-	-	0.0002	0.0013	-	0.0006	-	0.0004	<0.001	<0.0002	<0.0002	<0.0002	0.0006
	0021_SD023	01 Apr 2025	0021_SD023_250401	ES2510622	0.0074	0.0060	<0.0002	0.0134	0.0258	0.0255	-	-	<0.0002	<0.0002	-	<0.0002	-	0.0003	0.002	<0.0002	<0.0002	0.0004	0.0075
Pathway	0020_SD025	02 Apr 2025	0020_SD025_250402	ES2510618	0.0202	0.0076	<0.0002	0.0278	0.0293	0.0278	-	-	<0.0002	0.0007	-	0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
	0021_SD009	01 Apr 2025	0021_SD009_250401	ES2510622	0.0093	0.0022	<0.0002	0.0115	0.0115	0.0115	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
	0021_SD011	01 Apr 2025	0021_SD011_250401	ES2510622	0.0010	0.0004	<0.0002	0.0014	0.0014	0.0014	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
	0021_SD015	03 Apr 2025	0021_QC139_250403	ES2510113	0.0250	0.0054	<0.0002	0.0304	0.0314	0.0306	-	-	0.0002	<0.0002	-	0.0004	-	0.0004	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
			0021_QC239_250403	1210052	0.017[#1]	<0.005[#1]	<0.005	0.017	<0.05	0.017	0.017	0.017	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
			0021_SD015_250403	ES2510622	0.0307	0.0088	0.0002	0.0395	0.0422	0.0407	-	-	0.0006	<0.0002	-	0.0006	-	0.0006	<0.001	<0.0002	<0.0002	<0.0002	0.0004
	0021_SD017	02 Apr 2025	0021_SD017_250402	ES2510622	0.0845	0.0112	0.0009	0.0957	0.108	0.0990	-	-	0.0002	0.0024	-	0.0014	-	0.0004	<0.001	0.0008	0.0009	0.0003	0.0014
Receptor	0020_SD018	31 Mar 2025	0020_SD018_250331	ES2510618	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
	0020_SD019	31 Mar 2025	0020_SD019_250331	ES2510618	0.0012	<0.0002	<0.0002	0.0012	0.0012	0.0012	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
	0020_SD024	31 Mar 2025	0020_SD024_250331	ES2510618	0.0008	<0.0002	<0.0002	0.0008	0.0008	0.0008	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
	0020_SD026	31 Mar 2025	0020_QC101_250331	ES2510618	<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
			0020_QC201_250331	1209674	<0.005	<0.005	<0.005	<0.005	<0.05	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
			0020_SD026_250331	ES2510618	<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
Statistics																							
Number of Results					15	15	15	15	15	15	2	2	15	15	2	15	2	15	15	15	15	15	15
Number of Detects					12	8	3	12	11	12	1	1	4	3	0	5	0	5	1	1	1	2	4
Minimum Concentration					0.0002	<0.0002	0.0002	0.0002	0.0002	0.0002	<0.005	<0.005	0.0002	<0.0002	<0.005	0.0002	<0.005	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Minimum Detect					0.0002	0.0004	0.0002	0.0002	0.0002	0.0002	0.017	0.017	0.0002	0.0007	ND	0.0002	ND	0.0003	0.002	0.0008	0.0009	0.0003	0.0004
Maximum Concentration					0.0845	0.0112	<0.005	0.0957	0.108	0.099	0.017	0.017	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0075
Maximum Detect					0.0845	0.0112	0.0009	0.0957	0.108	0.099	0.017	0.017	0.0006	0.0024	ND	0.0014	ND	0.0006	0.002	0.0008	0.0009	0.0004	0.0075
Average Concentration *					0.017	0.0038	0.00049	0.02	0.024	0.021	0.0098	0.0098	0.00047	0.00069	0.0025	0.0006	0.0025	0.00053	0.00087	0.00047	0.00047	0.00045	0.0011
Geometric Average *					0.0037	0.0012	0.0002	0.0043	0.0055	0.0047	0.0065	0.0065	0.0002	0.00026	0.0025	0.00027	0.0025	0.00025	0.00068	0.00018	0.00018	0.00018	0.0003
Median Concentration *					0.0074	0.0025	0.0001	0.0115	0.025	0.0115	0.00975	0.00975	0.0001	0.0001	0.0025	0.0001	0.0025	0.0001	0.0005	0.0001	0.0001	0.0001	0.0001
Standard Deviation *					0.024	0.004	0.00084	0.027	0.03	0.028	0.01	0.01	0.00083	0.00098	0	0.00085	0	0.00082	0.00077	0.00084	0.00085	0.00084	0.002
Geometric Standard Deviation *					9.5	7.3	3.3	10	11	11	3.9	3.9	3.1	4.1	1	3.5	1	3.2	1.9	3.3	3.4	3.2	4.7
95% UCL (Student's-t) *					0.0274	0.0056	0.00086981	0.0325	0.0381	0.0342	0.0555	0.0555	0.00085206	0.00114	0.0025	0.0009855	0.0025	0.0008983	0.00122	0.00085089	0.00085901	0.00083338	0.00195
Number of Env Standard Exceedances					12	10	2	11	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Env Standard Exceedances (Detects Only)					11	8	0	11	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Detects					80	53	20	80	73	80	50	50	27	20	0	33	0	33	7	7	7	13	27
% of Non-Detects					20	47	80	20	27	20	50	50	73	80	100	67	100	67	93	93	93	87	73
% of Detects at or above Env Standards					73	53	0	73	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Results Below Env Standards or Non-Detect					27	47	100	27	53	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 (PFTrDA)	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 (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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	0.0002	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
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																
Source	0021_SD001	03 Apr 2025	0021_SD001_250403	ES2510622	<0.0002	<0.0002	<0.0005	<0.0002	0.0004	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	0021_SD023	01 Apr 2025	0021_SD023_250401	ES2510622	<0.0002	0.0022	<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
Pathway	0020_SD025	02 Apr 2025	0020_SD025_250402	ES2510618	<0.0002	<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
	0021_SD009	01 Apr 2025	0021_SD009_250401	ES2510622	<0.0002	<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
	0021_SD011	01 Apr 2025	0021_SD011_250401	ES2510622	<0.0002	<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
	0021_SD015	03 Apr 2025	0021_QC139_250403	ES2510113	<0.0002	<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
			0021_QC239_250403	1210052	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
			0021_SD015_250403	ES2510622	<0.0002	<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
	0021_SD017	02 Apr 2025	0021_SD017_250402	ES2510622	0.0003	0.0005	<0.0005	0.0002	0.0015	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Receptor	0020_SD018	31 Mar 2025	0020_SD018_250331	ES2510618	<0.0002	<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_SD019	31 Mar 2025	0020_SD019_250331	ES2510618	<0.0002	<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_SD024	31 Mar 2025	0020_SD024_250331	ES2510618	<0.0002	<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_SD026	31 Mar 2025	0020_QC101_250331	ES2510618	<0.0002	<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_QC201_250331	1209674	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
			0020_SD026_250331	ES2510618	<0.0002	<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

Statistics

Number of Results	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
Number of Detects	1	2	0	1	2	0	0	0	0	0	0	1	0	0	0	0
Minimum Concentration	<0.0002	<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
Minimum Detect	0.0003	0.0005	ND	0.0002	0.0004	ND	ND	ND	ND	ND	ND	0.0005	ND	ND	ND	ND
Maximum Concentration	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
Maximum Detect	0.0003	0.0022	ND	0.0002	0.0015	ND	ND	ND	ND	ND	ND	0.0005	ND	ND	ND	ND
Average Concentration *	0.00043	0.00059	0.00055	0.00043	0.00053	0.00055	0.00075	0.00055	0.00055	0.00075	0.00055	0.00045	0.00055	0.00055	0.00088	0.00055
Geometric Average *	0.00017	0.00021	0.00034	0.00016	0.0002	0.00034	0.00017	0.00034	0.00034	0.00017	0.00034	0.00017	0.00034	0.00034	0.00037	0.00034
Median Concentration *	0.0001	0.0001	0.00025	0.0001	0.0001	0.00025	0.0001	0.00025	0.00025	0.0001	0.00025	0.0001	0.00025	0.00025	0.00025	0.00025
Standard Deviation *	0.00084	0.00095	0.00079	0.00084	0.00088	0.00079	0.0017	0.00079	0.00079	0.0017	0.00079	0.00084	0.00079	0.00079	0.0017	0.00079
Geometric Standard Deviation *	3.1	3.8	2.2	3.1	3.6	2.2	4	2.2	2.2	4	2.2	3.2	2.2	2.2	2.9	2.2
95% UCL (Student's-t) *	0.00081563	0.00102	0.00091004	0.00080966	0.0009319	0.00091004	0.00154	0.00091004	0.00091004	0.00154	0.00091004	0.00082865	0.00091004	0.00091004	0.00164	0.00091004
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	7	13	0	7	13	0	0	0	0	0	0	7	0	0	0	0
% of Non-Detects	93	87	100	93	87	100	100	100	100	100	100	93	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 Quantification of linear and branched isomers has been conducted as a single total response

					PFAS			PFAS - Sums			PFAS - Perfluoroalkyl Sulfonic Acids				PFAS - Perfluoroalkyl Carboxylic Acids						
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)
					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	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	0.0002
0020_0021_Activity specific HHRA EPC for clay pools					0.0014	0.0014		0.0014													
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																	
Receptor	0021_SD066	03 Apr 2025	0021_SD066_250402	ES2510622	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	<0.0002	<0.0002	<0.0002
	0021_SD067	03 Apr 2025	0021_SD067_250402	ES2510622	0.0017	0.0004	<0.0002	0.0021	0.0021	0.0021	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
	0021_SD068	03 Apr 2025	0021_SD068_250402	ES2510622	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	<0.0002	<0.0002	<0.0002
	0021_SD069	02 Apr 2025	0021_SD069_250402	ES2510622	0.0038	0.0003	<0.0002	0.0041	0.0044	0.0041	<0.0002	0.0003	<0.0002	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
	0021_SD070	02 Apr 2025	0021_SD070_250402	ES2510622	0.0107	0.0007	<0.0002	0.0114	0.0114	0.0114	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Statistics																					
Number of Results					5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Number of Detects					5	3	0	5	5	5	0	1	0	0	0	0	0	0	0	0	0
Minimum Concentration					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	<0.0002	<0.0002	<0.0002
Minimum Detect					0.0004	0.0003	ND	0.0004	0.0004	0.0004	ND	0.0003	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration					0.0107	0.0007	<0.0002	0.0114	0.0114	0.0114	<0.0002	0.0003	<0.0002	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Maximum Detect					0.0107	0.0007	ND	0.0114	0.0114	0.0114	ND	0.0003	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *					0.0034	0.00032	0.0001	0.0037	0.0038	0.0037	0.0001	0.00014	0.0001	0.0001	0.0005	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Geometric Average *					0.0018	0.00024	0.0001	0.0019	0.0019	0.0019	0.0001	0.00012	0.0001	0.0001	0.0005	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Median Concentration *					0.0017	0.0003	0.0001	0.0021	0.0021	0.0021	0.0001	0.0001	0.0001	0.0001	0.0005	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Standard Deviation *					0.0043	0.00025	0	0.0045	0.0045	0.0045	0	0.000089	0	0	0	0	0	0	0	0	0
Geometric Standard Deviation *					3.8	2.4	1	4	4	4	1	1.6	1	1	1	1	1	1	1	1	1
95% UCL (Student's-t) *					0.00752	0.00055739	0.0001	0.00805	0.00812	0.00805	0.0001	0.00022527	0.0001	0.0001	0.0005	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Number of Env Standard Exceedances					3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Env Standard Exceedances (Detects Only)					3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Detects					100	60	0	100	100	100	0	20	0	0	0	0	0	0	0	0	0
% of Non-Detects					0	40	100	0	0	0	100	80	100	100	100	100	100	100	100	100	100
% of Detects at or above Env Standards					60	0	0	60	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Results Below Env Standards or Non-Detect					40	100	100	40	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

Environmental Standards

JBRF/HMAS Creswell OMP Site Specific Criteria

						PFAS - Perfluoroalkyl Sulfonamide								PFAS - Fluorotelomer Sulfonic Acids			
					Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	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 (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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
EQL					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																		
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**														
Receptor	0021_SD066	03 Apr 2025	0021_SD066_250402	ES2510622	<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
	0021_SD067	03 Apr 2025	0021_SD067_250402	ES2510622	<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
	0021_SD068	03 Apr 2025	0021_SD068_250402	ES2510622	<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
	0021_SD069	02 Apr 2025	0021_SD069_250402	ES2510622	<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
	0021_SD070	02 Apr 2025	0021_SD070_250402	ES2510622	<0.0006[#1]	<0.0002	<0.0002	<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
Statistics																		
Number of Results					5	5	5	5	5	5	5	5	5	5	5	5	5	5
Number of Detects					0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration					<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
Minimum Detect					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration					<0.0006	<0.0002	<0.0002	<0.0006	<0.0002	<0.0006	<0.0006	<0.0002	<0.0006	<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
Average Concentration *					0.00026	0.0001	0.0001	0.00026	0.0001	0.00026	0.00026	0.0001	0.00026	0.0001	0.00025	0.00025	0.00025	0.00025
Geometric Average *					0.00026	0.0001	0.0001	0.00026	0.0001	0.00026	0.00026	0.0001	0.00026	0.0001	0.00025	0.00025	0.00025	0.00025
Median Concentration *					0.00025	0.0001	0.0001	0.00025	0.0001	0.00025	0.00025	0.0001	0.00025	0.0001	0.00025	0.00025	0.00025	0.00025
Standard Deviation *					0.000022	0	0	0.000022	0	0.000022	0.000022	0	0.000022	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) *					0.00028132	0.0001	0.0001	0.00028132	0.0001	0.00028132	0.00028132	0.0001	0.00028132	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
Number of Env Standard Exceedances (Detects Only)					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
% of Non-Detects					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
% 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

Environmental Standards

JBRF/HMAS Creswell OMP Site Specific Criteria

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids						PFAS			
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)
					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	mg/kg	mg/kg
EQL					0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.005	0.005	0.0002	0.0002	0.005	0.0002	0.005	0.0002	0.001	0.0002	0.0002	0.0002
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																		
Source	0020_SD028	31 Mar 2025	0020_SD028_250331	ES2510618	0.0010	<0.0002	<0.0002	0.0010	0.0010	0.0010	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0020_SD006	31 Mar 2025	0020_SD006_250331	ES2510618	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
	0020_SD032	31 Mar 2025	0020_QC132_250331	ES2510618	0.0064	0.0007	<0.0002	0.0071	0.0077	0.0071	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
			0020_QC232_250331	1209674	<0.005	<0.005	<0.005	<0.005	<0.05	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
			0020_SD032_250331	ES2510618	0.0103	0.0010	<0.0002	0.0113	0.0119	0.0113	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
	0020_SD033	31 Mar 2025	0020_SD033_250331	ES2510618	0.0108	0.0015	<0.0002	0.0123	0.0164	0.0144	-	-	<0.0002	0.0005	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	0.0002
	0021_SD016	02 Apr 2025	0021_SD016_250402	ES2510622	0.0398	0.0103	0.0003	0.0501	0.0535	0.0507	-	-	<0.0002	0.0011	-	0.0005	-	0.0002	<0.001	<0.0002	<0.0002	<0.0002
	0021_SD018	03 Apr 2025	0021_SD018_250403	ES2510622	0.0341	0.0062	<0.0002	0.0403	0.0421	0.0403	-	-	<0.0002	0.0006	-	0.0003	-	0.0002	<0.001	<0.0002	<0.0002	<0.0002
	0021_SD020	03 Apr 2025	0021_SD020_250403	ES2510622	0.0008	0.0006	<0.0002	0.0014	0.0014	0.0014	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
	0021_SD021	04 Apr 2025	0021_SD021_250404	ES2510622	0.0329	0.0045	0.0003	0.0374	0.0423	0.0403	-	-	<0.0002	<0.0002	-	0.0003	-	0.0002	<0.001	0.0002	<0.0002	0.0003
Receptor	0020_SD001	01 Apr 2025	0020_QC253_250401	1209674	<0.005	<0.005	<0.005	<0.005	<0.05	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
			0020_SD001_250401	ES2510618	<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
	0020_SD002	01 Apr 2025	0020_QC252_250401	1209674	<0.005	<0.005	<0.005	<0.005	<0.05	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
			0020_SD002_250401	ES2510618	0.0017	0.0002	<0.0002	0.0019	0.0019	0.0019	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
	0020_SD004	31 Mar 2025	0020_QC151_250331	ES2510618	<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
			0020_SD004_250331	ES2510618	<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
	0020_SD007	01 Apr 2025	0020_SD007_250401	ES2510618	<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

Statistics

Number of Results	17	17	17	17	17	17	3	3	17	17	3	17	3	17	17	17	17	17
Number of Detects	10	8	2	10	10	10	0	0	0	3	0	3	0	3	0	1	0	2
Minimum Concentration	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.005	<0.005	<0.0002	<0.0002	<0.005	<0.0002	<0.005	0.0002	<0.001	0.0002	<0.0002	0.0002
Minimum Detect	0.0006	0.0002	0.0003	0.0006	0.0006	0.0006	ND	ND	ND	0.0005	ND	0.0003	ND	0.0002	ND	0.0002	ND	0.0002
Maximum Concentration	0.0398	0.0103	<0.005	0.0501	0.0535	0.0507	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Maximum Detect	0.0398	0.0103	0.0003	0.0501	0.0535	0.0507	ND	ND	ND	0.0011	ND	0.0005	ND	0.0002	ND	0.0002	ND	0.0003
Average Concentration *	0.0086	0.0019	0.00055	0.01	0.015	0.011	0.0025	0.0025	0.00052	0.00064	0.0025	0.00057	0.0025	0.00054	0.00085	0.00053	0.00052	0.00054
Geometric Average *	0.0019	0.00064	0.0002	0.002	0.0032	0.0023	0.0025	0.0025	0.00018	0.00025	0.0025	0.00022	0.0025	0.0002	0.00066	0.00018	0.00018	0.0002
Median Concentration *	0.0025	0.0007	0.0001	0.0025	0.0077	0.005	0.0025	0.0025	0.0001	0.0001	0.0025	0.0001	0.0025	0.0001	0.0005	0.0001	0.0001	0.0001
Standard Deviation *	0.013	0.0028	0.00093	0.016	0.018	0.016	0	0	0.00094	0.00093	0	0.00093	0	0.00094	0.00079	0.00094	0.00094	0.00094
Geometric Standard Deviation *	8.2	5.4	3.5	8.6	11	9	1	1	3.5	3.8	1	3.5	1	3.4	1.9	3.5	3.5	3.5
95% UCL (Student's-t) *	0.0143	0.00312	0.00094262	0.0169	0.0224	0.0178	0.0025	0.0025	0.00092287	0.00103	0.0025	0.0009632	0.0025	0.00093728	0.00119	0.00092769	0.00092287	0.00093757
Number of Env Standard Exceedances	13	10	3	10	9	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Env Standard Exceedances (Detects Only)	10	7	0	10	6	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Detects	59	47	12	59	59	59	0	0	0	18	0	18	0	18	0	6	0	12
% of Non-Detects	41	53	88	41	41	41	100	100	100	82	100	82	100	82	100	94	100	88
% of Detects at or above Env Standards	59	41	0	59	35	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Results Below Env Standards or Non-Detect	41	59	100	41	65	100	100	100	100	100	100	100	100	100	100	100	100	100

* A Non Detect Multiplier of 0.5 has been applied.

					- Perfluoroalkyl Carboxylic Acids						PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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	mg/kg
EQL					0.0002	0.0002	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
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																	
Source	0020_SD028	31 Mar 2025	0020_SD028_250331	ES2510618	<0.0002	<0.0002	<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
Pathway	0020_SD006	31 Mar 2025	0020_SD006_250331	ES2510618	<0.0002	<0.0002	<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_SD032	31 Mar 2025	0020_QC132_250331	ES2510618	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	<0.0005
			0020_QC232_250331	1209674	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
			0020_SD032_250331	ES2510618	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	<0.0005
	0020_SD033	31 Mar 2025	0020_SD033_250331	ES2510618	0.0003	<0.0002	0.0016	<0.0005	0.0003	0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0010	<0.0005	<0.0005	<0.0005	<0.0005
	0021_SD016	02 Apr 2025	0021_SD016_250402	ES2510622	0.0003	<0.0002	<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
	0021_SD018	03 Apr 2025	0021_SD018_250403	ES2510622	<0.0002	<0.0002	<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
	0021_SD020	03 Apr 2025	0021_SD020_250403	ES2510622	<0.0002	<0.0002	<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
	0021_SD021	04 Apr 2025	0021_SD021_250404	ES2510622	0.0016	<0.0002	0.0007	<0.0005	<0.0002	0.0005	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Receptor	0020_SD001	01 Apr 2025	0020_QC253_250401	1209674	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
			0020_SD001_250401	ES2510618	<0.0002	<0.0002	<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_SD002	01 Apr 2025	0020_QC252_250401	1209674	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
			0020_SD002_250401	ES2510618	<0.0002	<0.0002	<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_SD004	31 Mar 2025	0020_QC151_250331	ES2510618	<0.0002	<0.0002	<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_SD004_250331	ES2510618	<0.0002	<0.0002	<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_SD007	01 Apr 2025	0020_SD007_250401	ES2510618	<0.0002	<0.0002	<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

Statistics

Number of Results	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
Number of Detects	3	0	2	0	1	2	0	0	0	0	0	0	3	0	0	0	0
Minimum Concentration	<0.0002	<0.0002	<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
Minimum Detect	0.0003	ND	0.0007	ND	0.0003	0.0002	ND	ND	ND	ND	ND	ND	0.0006	ND	ND	ND	ND
Maximum Concentration	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
Maximum Detect	0.0016	ND	0.0016	ND	0.0003	0.0005	ND	ND	ND	ND	ND	ND	0.001	ND	ND	ND	ND
Average Concentration *	0.00064	0.00052	0.00065	0.00065	0.00054	0.00055	0.00065	0.00096	0.00065	0.00065	0.00096	0.00065	0.00064	0.00065	0.00065	0.0011	0.00065
Geometric Average *	0.00024	0.00018	0.00023	0.00038	0.00019	0.0002	0.00038	0.0002	0.00038	0.00038	0.0002	0.00038	0.00025	0.00038	0.00038	0.00042	0.00038
Median Concentration *	0.0001	0.0001	0.0001	0.00025	0.0001	0.0001	0.00025	0.0001	0.00025	0.00025	0.0001	0.00025	0.0001	0.00025	0.00025	0.00025	0.00025
Standard Deviation *	0.00096	0.00094	0.00096	0.00088	0.00094	0.00093	0.00088	0.0019	0.00088	0.00088	0.0019	0.00088	0.00093	0.00088	0.00088	0.0019	0.00088
Geometric Standard Deviation *	3.8	3.5	4	2.5	3.5	3.6	2.5	4.7	2.5	2.5	4.7	2.5	3.8	2.5	2.5	3.2	2.5
95% UCL (Student's-t) *	0.00104	0.00092287	0.00105	0.00102	0.00093278	0.0009485	0.00102	0.00178	0.00102	0.00102	0.00178	0.00102	0.00103	0.00102	0.00102	0.00188	0.00102
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	18	0	12	0	6	12	0	0	0	0	0	0	18	0	0	0	0
% of Non-Detects	82	100	88	100	94	88	100	100	100	100	100	100	82	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 - Perfluoroalk				
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)
					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	mg/kg	mg/kg	mg/kg
EQL					0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.005	0.005	0.0002	0.0002	0.005	0.0002	0.005	0.0002	0.001	0.0002	0.0002	0.0002	0.0002
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																			
Pathway	0021_SD029	03 Apr 2025	0021_SD029_250403	ES2510622	<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
Receptor	0021_SD028	04 Apr 2025	0021_SD028_250404	ES2510622	0.0008	<0.0002	<0.0002	0.0008	0.0008	0.0008	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
	0021_SD030	04 Apr 2025	0021_SD030_250404	ES2510622	<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
	0021_SD031	07 Apr 2025	0021_SD031_250407	ES2510622	<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
	0021_SD080	04 Apr 2025	0021_QC141_250404	ES2510113	<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
			0021_QC241_250404	1210052	<0.005	<0.005	<0.005	<0.005	<0.05	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
			0021_SD080_250404	ES2510622	<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
	0021_SD093	04 Apr 2025	0021_QC111_250404	ES2510113	<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
			0021_QC211_250404	1210052	<0.005	<0.005	<0.005	<0.005	<0.05	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
			0021_SD093_250404	ES2510622	<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
Statistics																							
Number of Results					10	10	10	10	10	10	2	2	10	10	2	10	2	10	10	10	10	10	10
Number of Detects					1	0	0	1	1	1	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	<0.005	<0.005	<0.0002	<0.0002	<0.005	<0.0002	<0.005	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Minimum Detect					0.0008	ND	ND	0.0008	0.0008	0.0008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration					<0.005	<0.005	<0.005	<0.005	<0.05	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Maximum Detect					0.0008	ND	ND	0.0008	0.0008	0.0008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *					0.00065	0.00058	0.00058	0.00065	0.0052	0.0012	0.0025	0.0025	0.00058	0.00058	0.0025	0.00058	0.0025	0.00058	0.0009	0.00058	0.00058	0.00058	0.00058
Geometric Average *					0.00023	0.00019	0.00019	0.00023	0.00037	0.00027	0.0025	0.0025	0.00019	0.00019	0.0025	0.00019	0.0025	0.00019	0.00069	0.00019	0.00019	0.00019	0.00019
Median Concentration *					0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0025	0.0025	0.0001	0.0001	0.0025	0.0001	0.0025	0.0001	0.0005	0.0001	0.0001	0.0001	0.0001
Standard Deviation *					0.001	0.001	0.001	0.001	0.01	0.002	0	0	0.001	0.001	0	0.001	0	0.001	0.00084	0.001	0.001	0.001	0.001
Geometric Standard Deviation *					4.1	3.9	3.9	4.1	10	5.3	1	1	3.9	3.9	1	3.9	1	3.9	2	3.9	3.9	3.9	3.9
95% UCL (Student's-t) *					0.00123	0.00117	0.00117	0.00123	0.0112	0.00233	0.0025	0.0025	0.00117	0.00117	0.0025	0.00117	0.0025	0.00117	0.00139	0.00117	0.00117	0.00117	0.00117
Number of Env Standard Exceedances					3	2	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Env Standard Exceedances (Detects Only)					1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Detects					10	0	0	10	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Non-Detects					90	100	100	90	90	90	100	100	100	100	100	100	100	100	100	100	100	100	100
% of Detects at or above Env Standards					10	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Results Below Env Standards or Non-Detect					90	100	100	90	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 (PFTrDA)	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 (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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	0.0002	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
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																
Pathway	0021_SD029	03 Apr 2025	0021_SD029_250403	ES2510622	<0.0002	<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
Receptor	0021_SD028	04 Apr 2025	0021_SD028_250404	ES2510622	<0.0002	<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
	0021_SD030	04 Apr 2025	0021_SD030_250404	ES2510622	<0.0002	<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
	0021_SD031	07 Apr 2025	0021_SD031_250407	ES2510622	<0.0002	<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
	0021_SD080	04 Apr 2025	0021_QC141_250404	ES2510113	<0.0002	<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
			0021_QC241_250404	1210052	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
			0021_SD080_250404	ES2510622	<0.0002	<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
	0021_SD093	04 Apr 2025	0021_QC111_250404	ES2510113	<0.0002	<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
			0021_QC211_250404	1210052	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
			0021_SD093_250404	ES2510622	<0.0002	<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
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					<0.0002	<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
Minimum Detect					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration					<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
Maximum Detect					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *					0.00058	0.00058	0.0007	0.00058	0.00058	0.0007	0.0011	0.0007	0.0007	0.0011	0.0007	0.00058	0.0007	0.0007	0.0012	0.0007
Geometric Average *					0.00019	0.00019	0.0004	0.00019	0.00019	0.0004	0.00022	0.0004	0.0004	0.00022	0.0004	0.00019	0.0004	0.0004	0.00046	0.0004
Median Concentration *					0.0001	0.0001	0.00025	0.0001	0.0001	0.00025	0.0001	0.00025	0.00025	0.0001	0.00025	0.0001	0.00025	0.00025	0.00025	0.00025
Standard Deviation *					0.001	0.001	0.00095	0.001	0.001	0.00095	0.0021	0.00095	0.00095	0.0021	0.00095	0.001	0.00095	0.00095	0.002	0.00095
Geometric Standard Deviation *					3.9	3.9	2.6	3.9	3.9	2.6	5.2	2.6	2.6	5.2	2.6	3.9	2.6	2.6	3.5	2.6
95% UCL (Student's-t) *					0.00117	0.00117	0.00125	0.00117	0.00117	0.00125	0.00228	0.00125	0.00125	0.00228	0.00125	0.00117	0.00125	0.00125	0.00236	0.00125
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 - Perfluoroalk				
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)
					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	mg/kg	mg/kg	mg/kg
EQL					0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.005	0.005	0.0002	0.0002	0.005	0.0002	0.005	0.0002	0.001	0.0002	0.0002	0.0002	0.0002
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																			
Source	0021_SD002	03 Apr 2025	0021_SD002_250403	ES2510622	0.0127	0.0023	<0.0002	0.0150	0.0154	0.0150	-	-	<0.0002	0.0002	-	0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
	0021_SD003	03 Apr 2025	0021_SD003_250403	ES2510622	0.0056	0.0003	<0.0002	0.0059	0.0059	0.0059	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
	0021_SD004	02 Apr 2025	0021_SD004_250402	ES2510622	0.0008	<0.0002	<0.0002	0.0008	0.0008	0.0008	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
	0021_SD005	02 Apr 2025	0021_SD005_250402	ES2510622	0.0010	<0.0002	<0.0002	0.0010	0.0010	0.0010	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
	0021_SD012	02 Apr 2025	0021_SD012_250402	ES2510622	<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
	0021_SD013	02 Apr 2025	0021_SD013_250402	ES2510622	0.0011	<0.0002	<0.0002	0.0011	0.0011	0.0011	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
	0021_SD110	02 Apr 2025	0021_SD110_250402	ES2510622	0.0036	0.0004	<0.0002	0.0040	0.0040	0.0040	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Pathway	0021_SD006	02 Apr 2025	0021_SD006_250404	ES2510622	0.150	0.0229	0.0008	0.173	0.194	0.179	-	-	0.0006	0.0093	-	0.0014	-	0.0005	<0.001	<0.0002	<0.0002	0.0006	0.0028
	0021_SD014	02 Apr 2025	0021_SD014_250402	ES2510622	<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
	0021_SD036	01 Apr 2025	0021_SD036_250401	ES2510622	<0.0002	0.0004	<0.0002	0.0004	0.0004	0.0004	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
	0021_SD037	03 Apr 2025	0021_SD037_250401	ES2510622	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	<0.0002
	0021_SD040	03 Apr 2025	0021_SD040_250403	ES2510622	0.0023	0.0018	<0.0002	0.0041	0.0041	0.0041	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
	0021_SD111	01 Apr 2025	0021_SD111_250401	ES2510622	0.104	0.0143	0.0006	0.118	0.132	0.125	-	-	0.0002	0.0032	-	0.0016	-	0.0004	0.001	<0.0002	<0.0002	0.0002	0.0030
Receptor	0021_SD043	03 Apr 2025	0021_SD043_250403	ES2510622	<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
	0021_SD044	01 Apr 2025	0021_QC104_250401	ES2510113	0.0005	<0.0002	<0.0002	0.0005	0.0005	0.0005	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
			0021_QC204_250401	1210052	<0.005	<0.005	<0.005	<0.005	<0.05	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
			0021_SD044_250401	ES2510622	<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
	0021_SD035	01 Apr 2025	0021_SD035_250401	ES2510622	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	<0.0002

Statistics

Number of Results	18	18	18	18	18	18	1	1	18	18	1	18	1	18	18	18	18	18	18
Number of Detects	12	8	2	14	14	14	0	0	2	3	0	3	0	2	1	0	0	2	2
Minimum Concentration	<0.0002	0.0002	<0.0002	0.0002	0.0002	0.0002	<0.005	<0.005	0.0002	0.0002	<0.005	0.0002	<0.005	<0.0002	0.001	<0.0002	<0.0002	0.0002	<0.0002
Minimum Detect	0.0004	0.0002	0.0006	0.0002	0.0002	0.0002	ND	ND	0.0002	0.0002	ND	0.0002	ND	0.0004	0.001	ND	ND	0.0002	0.0028
Maximum Concentration	0.15	0.0229	<0.005	0.173	0.194	0.179	<0.005	<0.005	<0.005	0.0093	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Maximum Detect	0.15	0.0229	0.0008	0.173	0.194	0.179	ND	ND	0.0006	0.0093	ND	0.0016	ND	0.0005	0.001	ND	ND	0.0006	0.003
Average Concentration *	0.016	0.0026	0.0003	0.018	0.021	0.019			0.00027	0.00092		0.00039		0.00027	0.00064	0.00023	0.00023	0.00027	0.00054
Geometric Average *	0.0012	0.00038	0.00015	0.0014	0.0016	0.0015	0.0025	0.0025	0.00014	0.00019	0.0025	0.00017	0.0025	0.00014	0.00057	0.00012	0.00012	0.00014	0.00017
Median Concentration *	0.0009	0.00015	0.0001	0.0009	0.0009	0.0009	0.0025	0.0025	0.0001	0.0001	0.0025	0.0001	0.0025	0.0001	0.0005	0.0001	0.0001	0.0001	0.0001
Standard Deviation *	0.041	0.0061	0.00058	0.047	0.053	0.049			0.00057	0.0023		0.00069		0.00057	0.00048	0.00057	0.00057	0.00057	0.001
Geometric Standard Deviation *	9.7	6.1	2.6	9.2	10	9.5			2.3	4.2		3		2.4	1.5	2.1	2.1	2.3	3.6
95% UCL (Student's-t) *	0.0328	0.00505	0.00053909	0.0376	0.0431	0.0393			0.00050031	0.00185		0.00067834		0.00050494	0.00083535	0.00046528	0.00046528	0.00050031	0.00096524
Number of Env Standard Exceedances	13	8	1	13	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Env Standard Exceedances (Detects Only)	12	7	0	13	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Detects	67	44	11	78	78	78	0	0	11	17	0	17	0	11	6	0	0	11	11
% of Non-Detects	33	56	89	22	22	22	100	100	89	83	100	83	100	89	94	100	100	89	89
% of Detects at or above Env Standards	67	39	0	72	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Results Below Env Standards or Non-Detect	33	61	100	28	67	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

					tyl Carboxylic Acids					PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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	0.0002	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
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																
Source	0021_SD002	03 Apr 2025	0021_SD002_250403	ES2510622	<0.0002	<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
	0021_SD003	03 Apr 2025	0021_SD003_250403	ES2510622	<0.0002	<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
	0021_SD004	02 Apr 2025	0021_SD004_250402	ES2510622	<0.0002	<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
	0021_SD005	02 Apr 2025	0021_SD005_250402	ES2510622	<0.0002	<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
	0021_SD012	02 Apr 2025	0021_SD012_250402	ES2510622	<0.0002	<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
	0021_SD013	02 Apr 2025	0021_SD013_250402	ES2510622	<0.0002	<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
	0021_SD110	02 Apr 2025	0021_SD110_250402	ES2510622	<0.0002	<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
Pathway	0021_SD006	02 Apr 2025	0021_SD006_250404	ES2510622	0.0004	0.0016	<0.0006[#1]	<0.0002	0.0003	<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
	0021_SD014	02 Apr 2025	0021_SD014_250402	ES2510622	<0.0002	<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
	0021_SD036	01 Apr 2025	0021_SD036_250401	ES2510622	<0.0002	<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
	0021_SD037	03 Apr 2025	0021_SD037_250401	ES2510622	<0.0002	<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
	0021_SD040	03 Apr 2025	0021_SD040_250403	ES2510622	<0.0002	<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
	0021_SD111	01 Apr 2025	0021_SD111_250401	ES2510622	<0.0002	0.0014	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0016	<0.0005	<0.0005	<0.0005	<0.0005
Receptor	0021_SD043	03 Apr 2025	0021_SD043_250403	ES2510622	<0.0002	<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
	0021_SD044	01 Apr 2025	0021_QC104_250401	ES2510113	<0.0002	<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
			0021_QC204_250401	1210052	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
			0021_SD044_250401	ES2510622	<0.0002	<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
	0021_SD035	01 Apr 2025	0021_SD035_250401	ES2510622	<0.0002	<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

Statistics

Number of Results	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
Number of Detects	1	2	0	0	1	0	0	0	0	0	0	2	0	0	0	0
Minimum Concentration	<0.0002	<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
Minimum Detect	0.0004	0.0014	ND	ND	0.0003	ND	ND	ND	ND	ND	ND	0.0011	ND	ND	ND	ND
Maximum Concentration	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
Maximum Detect	0.0004	0.0016	ND	ND	0.0003	ND	ND	ND	ND	ND	ND	0.0016	ND	ND	ND	ND
Average Concentration *	0.00025	0.00039	0.00038	0.00023	0.00024	0.00038	0.00037	0.00038	0.00038	0.00037	0.00038	0.00037	0.00038	0.00038	0.00051	0.00038
Geometric Average *	0.00013	0.00016	0.00029	0.00012	0.00013	0.00029	0.00012	0.00029	0.00029	0.00012	0.00029	0.00016	0.00028	0.00028	0.0003	0.00028
Median Concentration *	0.0001	0.0001	0.00025	0.0001	0.0001	0.00025	0.0001	0.00025	0.00025	0.0001	0.00025	0.0001	0.00025	0.00025	0.00025	0.00025
Standard Deviation *	0.00057	0.00069	0.00053	0.00057	0.00056	0.00053	0.0012	0.00053	0.00053	0.0012	0.00053	0.00067	0.00053	0.00053	0.0011	0.00053
Geometric Standard Deviation *	2.2	3	1.7	2.1	2.2	1.7	2.5	1.7	1.7	2.5	1.7	2.9	1.7	1.7	2	1.7
95% UCL (Student's-t) *	0.00048205	0.00067362	0.000595	0.00046528	0.00047606	0.000595	0.00084578	0.000595	0.000595	0.00084578	0.000595	0.00064775	0.00059245	0.00059245	0.00097295	0.00059245
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	6	11	0	0	6	0	0	0	0	0	0	11	0	0	0	0
% of Non-Detects	94	89	100	100	94	100	100	100	100	100	100	89	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

					PFAS			PFAS - Sums			PFAS - Perfluoroalkyl Sulfonic Acids				PFAS - Perfluoroalkyl Carboxylic					
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)
					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_Human health ceremonial					0.0002	0.0002		0.0002												
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																
Pathway	0021_SD049	03 Apr 2025	0021_SD049_250404	ES2510622	<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
Receptor	0021_SD046	03 Apr 2025	0021_SD046_250401	ES2510622	<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
	0021_SD075	01 Apr 2025	0021_SD075_250401	ES2510622	<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
	0021_SD188	03 Apr 2025	0021_SD188_250403	ES2510622	<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
			0021_SD188_A_250403	ES2510622	<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
Statistics																				
Number of Results					5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Number of Detects					0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0
Minimum Concentration					<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	0.0002	0.0002	ND	ND	ND	ND	ND	ND	ND	ND	0.0002	ND
Maximum Concentration					<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	0.0002	0.0002	ND	ND	ND	ND	ND	ND	ND	ND	0.0002	ND
Average Concentration *					0.0001	0.0001	0.0001	0.0001	0.00012	0.00012	0.0001	0.0001	0.0001	0.0001	0.0005	0.0001	0.0001	0.0001	0.00012	0.0001
Geometric Average *					0.0001	0.0001	0.0001	0.0001	0.00011	0.00011	0.0001	0.0001	0.0001	0.0001	0.0005	0.0001	0.0001	0.0001	0.00011	0.0001
Median Concentration *					0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0005	0.0001	0.0001	0.0001	0.0001	0.0001
Standard Deviation *					0	0	0	0	0.000045	0.000045	0	0	0	0	0	0	0	0	0.000045	0
Geometric Standard Deviation *					1	1	1	1	1.4	1.4	1	1	1	1	1	1	1	1	1.4	1
95% UCL (Student's-t) *					0.0001	0.0001	0.0001	0.0001	0.00016264	0.00016264	0.0001	0.0001	0.0001	0.0001	0.0005	0.0001	0.0001	0.0001	0.00016264	0.0001
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	20	20	0	0	0	0	0	0	0	0	20	0
% of Non-Detects					100	100	100	100	80	80	100	100	100	100	100	100	100	100	80	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.

Environmental Standards

JBRF/HMAS Creswell OMP Site Specific Criteria

					Acids				PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	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 (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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_Human health ceremonial																			
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**															
Pathway	0021_SD049	03 Apr 2025	0021_SD049_250404	ES2510622	<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
Receptor	0021_SD046	03 Apr 2025	0021_SD046_250401	ES2510622	<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
	0021_SD075	01 Apr 2025	0021_SD075_250401	ES2510622	<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
	0021_SD188	03 Apr 2025	0021_SD188_250403	ES2510622	<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
			0021_SD188_A_250403	ES2510622	<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
Statistics																			
Number of Results					5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Number of Detects					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
Minimum Detect					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
Maximum Detect					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	0.00025	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	0.00025	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	0.00025	0.00025	0.00025
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) *					0.0001	0.00025	0.0001	0.0001	0.00025	0.0001	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
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.

Environmental Standards

JBRF/HMAS Creswell OMP Site Specific Criteria

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids						PFAS - Perfluoroalk				
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)
					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	mg/kg	mg/kg	mg/kg
EQL					0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.005	0.005	0.0002	0.0002	0.005	0.0002	0.005	0.0002	0.001	0.0002	0.0002	0.0002	0.0002
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																			
Pathway	0021_SD054	02 Apr 2025	0021_QC135_250402	ES2510113	0.0082	0.0007	<0.0005[#1]	0.0089	0.0089	0.0089	-	-	<0.0005[#1]	<0.0005[#1]	-	<0.0005[#1]	-	<0.0005[#1]	<0.002[#1]	<0.0005[#1]	<0.0005[#1]	<0.0005[#1]	<0.0005[#1]
			0021_QC235_250402	1210052	0.0051	<0.005	<0.005	0.0051	<0.05	<0.01	0.0051	0.0051	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
			0021_SD054_250402	ES2510622	0.0070	<0.0002	<0.0002	0.0070	0.0083	0.0070	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Receptor	0021_SD050	03 Apr 2025	0021_SD050_250401	ES2510622	0.0013	<0.0002	<0.0002	0.0013	0.0013	0.0013	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
	0021_SD058	03 Apr 2025	0021_SD058_250401	ES2510622	<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
	0021_SD059	03 Apr 2025	0021_SD059_250401	ES2510622	<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
Statistics																							
Number of Results					6	6	6	6	6	6	1	1	6	6	1	6	1	6	6	6	6	6	6
Number of Detects					4	1	0	4	3	3	1	1	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	0.0051	0.0051	<0.0002	<0.0002	<0.005	<0.0002	<0.005	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Minimum Detect					0.0013	0.0007	ND	0.0013	0.0013	0.0013	0.0051	0.0051	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration					0.0082	<0.005	<0.005	0.0089	<0.05	<0.01	0.0051	0.0051	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Maximum Detect					0.0082	0.0007	ND	0.0089	0.0089	0.0089	0.0051	0.0051	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *					0.0036	0.0006	0.00052	0.0038	0.0073	0.0037			0.00052	0.00052		0.00052		0.00052	0.00092	0.00052	0.00052	0.00052	0.00052
Geometric Average *					0.0012	0.00024	0.0002	0.0013	0.0017	0.0013	0.0051	0.0051	0.0002	0.0002	0.0025	0.0002	0.0025	0.0002	0.00073	0.0002	0.0002	0.0002	0.0002
Median Concentration *					0.0032	0.0001	0.0001	0.0032	0.0048	0.00315	0.0051	0.0051	0.0001	0.0001	0.0025	0.0001	0.0025	0.0001	0.0005	0.0001	0.0001	0.0001	0.0001
Standard Deviation *					0.0036	0.00096	0.00097	0.0038	0.0096	0.0038			0.00097	0.00097		0.00097		0.00097	0.0008	0.00097	0.00097	0.00097	0.00097
Geometric Standard Deviation *					7.9	4	3.6	8	11	8			3.6	3.6		3.6		3.6	1.9	3.6	3.6	3.6	3.6
95% UCL (Student's-t) *					0.00659	0.00139	0.00132	0.00686	0.0151	0.00684			0.00132	0.00132		0.00132		0.00132	0.00158	0.00132	0.00132	0.00132	0.00132
Number of Env Standard Exceedances					4	2	1	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Env Standard Exceedances (Detects Only)					4	1	0	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Detects					67	17	0	67	50	50	100	100	0	0	0	0	0	0	0	0	0	0	0
% of Non-Detects					33	83	100	33	50	50	0	0	100	100	100	100	100	100	100	100	100	100	100
% of Detects at or above Env Standards					67	17	0	67	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Results Below Env Standards or Non-Detect					33	83	100	33	67	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

					yl Carboxylic Acids					PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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	0.0002	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
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																
Pathway	0021_SD054	02 Apr 2025	0021_QC135_250402	ES2510113	<0.0005[#1]	<0.0005[#1]	<0.0012[#1]	<0.0005[#1]	<0.0005[#1]	<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
			0021_QC235_250402	1210052	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	0.0085	<0.005	<0.01	0.0073	<0.005	<0.005	<0.005	<0.01	<0.005
			0021_SD054_250402	ES2510622	0.0004	<0.0002	<0.0006[#1]	<0.0002	<0.0002	0.0009	<0.0002	<0.0006[#1]	<0.0006[#1]	<0.0002	<0.0006[#1]	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Receptor	0021_SD050	03 Apr 2025	0021_SD050_250401	ES2510622	<0.0002	<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
	0021_SD058	03 Apr 2025	0021_SD058_250401	ES2510622	<0.0002	<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
	0021_SD059	03 Apr 2025	0021_SD059_250401	ES2510622	<0.0002	<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
Statistics																				
Number of Results					6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Number of Detects					1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0
Minimum Concentration					<0.0002	<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
Minimum Detect					0.0004	ND	ND	ND	ND	0.0009	ND	0.0085	ND	ND	0.0073	ND	ND	ND	ND	ND
Maximum Concentration					<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	0.0085	<0.005	<0.01	0.0073	<0.005	<0.005	<0.005	<0.01	<0.005
Maximum Detect					0.0004	ND	ND	ND	ND	0.0009	ND	0.0085	ND	ND	0.0073	ND	ND	ND	ND	ND
Average Concentration *					0.00058	0.00052	0.00069	0.00052	0.00052	0.00079	0.00094	0.0017	0.00069	0.00094	0.0015	0.00052	0.00062	0.00062	0.001	0.00062
Geometric Average *					0.00025	0.0002	0.00044	0.0002	0.0002	0.00053	0.00022	0.00054	0.00044	0.00022	0.00052	0.0002	0.00037	0.00037	0.00041	0.00037
Median Concentration *					0.000175	0.0001	0.000275	0.0001	0.0001	0.000425	0.0001	0.000275	0.000275	0.0001	0.000275	0.0001	0.00025	0.00025	0.00025	0.00025
Standard Deviation *					0.00095	0.00097	0.0009	0.00097	0.00097	0.00088	0.002	0.0033	0.0009	0.002	0.0028	0.00097	0.00092	0.00092	0.0019	0.00092
Geometric Standard Deviation *					3.6	3.6	2.5	3.6	3.6	2.6	4.8	4	2.5	4.8	3.8	3.6	2.6	2.6	3.4	2.6
95% UCL (Student's-t) *					0.00136	0.00132	0.00143	0.00132	0.00132	0.00151	0.00258	0.00444	0.00143	0.00258	0.00384	0.00132	0.00138	0.00138	0.00264	0.00138
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					17	0	0	0	0	17	0	17	0	0	17	0	0	0	0	0
% of Non-Detects					83	100	100	100	100	83	100	83	100	100	83	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

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids						PFAS - Perfluoroalk				
					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)	Perfluorononane sulfonate (PFNS)	Perfluorodecanesulfonic acid (PFDS)	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	µg/L	µg/L
EQL					0.0003	0.0005	0.0005	0.0003	0.0003	0.01	0.0003	0.01	0.0005	0.01	0.0005	0.0005	0.01	0.0005	0.002	0.0005	0.0005	0.0005	0.0005
0020_0021_Human health consumption of biota					**0.01**	**0.01**					**0.01**												
PFAS NEMP 2025 Freshwater and Interim Marine 95%					0.13		220																
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																			
Receptor	0021_MW114	12 Apr 2018	BB_MW01_180412	ES1810721	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	-	<0.0003	-	<0.0005	-	<0.0005	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		15 May 2018	BB_MW01_180515	ES1814324	<0.01	<0.02	<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
		12 Feb 2019	BB_MW01_190212	ES1905115	0.0003	<0.0005	<0.0005	0.0103	0.0103	-	0.0003	-	<0.0005	-	<0.0005	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		29 May 2019	BB_MW01_190529	ES1916831	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	-	<0.0003	-	<0.0005	-	<0.0005	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		22 Oct 2021	0021_MW114_211022	ES2138639	<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
		06 Apr 2022	0021_MW114_220406	ES2212442	<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
			0021_QC107_220406	ES2212442	<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
		10 Oct 2022	0021_MW114_221010	ES2237106	<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
		18 Apr 2023	0021_MW114_230418	ES2313364	<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
		17 Oct 2023	0021_MW114_231017	ES2336398	<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
		09 Apr 2024	0021_MW114_240409	ES2411994	<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
		26 Oct 2024	0021_MW114_241026	ES2435541	<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
		04 Apr 2025	0021_MW114_250404	ES2510113	<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
			0021_QC109_250404	ES2510113	<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
			0021_QC209_250404	1210052	<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	<0.05	<0.01	<0.01	<0.01	<0.01
	0021_MW115	12 Apr 2018	BB_MW02_180412	ES1810721	0.0008	0.0007	<0.0005	0.0015	0.0015	-	0.0015	-	<0.0005	-	<0.0005	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		16 May 2018	BB_MW02_180516	ES1814324	<0.01	<0.02	<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
			BB_QC116_180516	ES1814324	<0.01	<0.02	<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
			BB_QC217_180516	599245	<0.01	<0.01	<0.01	<0.1	<0.05	-	<0.01	-	<0.01	-	<0.01	<0.01	-	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01
		12 Feb 2019	BB_MW02_190212	ES1905115	0.0003	<0.0005	<0.0005	0.0013	0.0013	-	0.0003	-	<0.0005	-	<0.0005	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		30 May 2019	0021_QC101_190530	ES1916831	0.0005	<0.0005	<0.0005	0.0005	0.0005	-	0.0005	-	<0.0005	-	<0.0005	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
			BB_MW02_190530	ES1916831	0.0005	<0.0005	<0.0005	0.0005	0.0005	-	0.0005	-	<0.0005	-	<0.0005	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		22 Oct 2021	0021_MW115_211022	ES2138639	<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
		17 Oct 2023	0021_MW115_231017	ES2336398	<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
		11 Apr 2024	0021_MW115_240411	ES2411994	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
	0021_SW083	19 Mar 2018	UN3_SW03_180319	ES1808818	**0.0109**	0.0086	0.0008	0.0267	0.0254	-	**0.0195**	-	0.0005	-	<0.0005	0.0005	-	0.0008	<0.002	<0.0005	<0.0005	<0.0005	0.0016
		17 May 2018	UN3_SW03_180517	ES1814324	0.0032	0.0068	<0.0005	0.0100	0.0100	-	0.0100	-	<0.0005	-	<0.0005	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		22 Oct 2021	0021_SW083_211022	ES2138639	<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
		10 Oct 2022	0021_SW083_221010	ES2237106	<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
		18 Apr 2023	0021_SW083_230418	ES2313364	<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
		17 Oct 2023	0021_SW083_231017	ES2336399	<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
		09 Apr 2024	0021_SW083_240409	ES2412012	<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
		25 Oct 2024	0021_SW083_241025	ES2435541	<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
		04 Apr 2025	0021_SW083_250404	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	<0.02	<0.02	<0.02
	0021_SW212	25 Oct 2024	0021_SW212_241025	ES2435541	0.0048	0.0017	<0.0005	-	0.0065	-	0.0065	-	<0.0005	-	-	-	-	-	<0.002	-	-	<0.0005	<0.0005
		04 Apr 2025	0021_SW212_250404	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	<0.02	<0.02	<0.02

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids						PFAS - Perfluoroalk				
	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)	Perfluorononane sulfonate (PFNS)	Perfluorodecanesulfonic acid (PFDS)	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	µg/L	µg/L
EQL	0.0003	0.0005	0.0005	0.0003	0.0003	0.01	0.0003	0.01	0.0005	0.01	0.0005	0.0005	0.01	0.0005	0.002	0.0005	0.0005	0.0005	0.0005
0020_0021_Human health consumption of biota	**0.01**	**0.01**					**0.01**												
PFAS NEMP 2025 Freshwater and Interim Marine 95%	0.13		220																
Statistics																			
Number of Results	36	36	36	35	36	1	36	1	36	1	35	35	1	35	36	35	35	36	36
Number of Detects	9	4	1	8	9	0	9	0	1	0	0	1	0	1	0	0	0	0	1
Minimum Concentration	0.0003	<0.0005	<0.0005	<0.0003	<0.0003	<0.01	0.0003	<0.01	0.0005	<0.01	<0.0005	0.0005	<0.01	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
Minimum Detect	0.0003	0.0007	0.0008	0.0005	0.0005	ND	0.0003	ND	0.0005	ND	ND	0.0005	ND	0.0008	ND	ND	ND	ND	0.0016
Maximum Concentration	0.0109	<0.02	<0.01	<0.1	<0.05	<0.01	0.0195	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02
Maximum Detect	0.0109	0.0086	0.0008	0.0267	0.0254	ND	0.0195	ND	0.0005	ND	ND	0.0005	ND	0.0008	ND	ND	ND	ND	0.0016
Average Concentration *	0.0044	0.0046	0.0037	0.0079	0.0064		0.0048		0.007		0.0072	0.0072		0.0072	0.035	0.0072	0.0072	0.007	0.0071
Geometric Average *	0.003	0.003	0.0022	0.0042	0.0041	0.005	0.0033	0.005	0.0035	0.005	0.0037	0.0038	0.005	0.0038	0.016	0.0037	0.0037	0.0035	0.0036
Median Concentration *	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.01	0.005	0.01	0.01	0.005	0.01	0.05	0.01	0.01	0.01	0.01
Standard Deviation *	0.0024	0.0027	0.0021	0.011	0.0062		0.0034		0.0044		0.0043	0.0043		0.0043	0.022	0.0043	0.0043	0.0044	0.0044
Geometric Standard Deviation *	3.2	3.4	3.7	3.5	3.2		3.3		5.1		5.1	4.9		4.8	5.8	5.1	5.1	5.3	5
95% UCL (Student's-t) *	0.00502	0.00532	0.0043	0.0111	0.00817		0.0058		0.00826		0.00844	0.00844		0.00845	0.0412	0.00844	0.00844	0.00825	0.00828
Number of Env Standard Exceedances	1	0	0	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	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
% of Detects	25	11	3	23	25	0	25	0	3	0	0	3	0	3	0	0	0	0	3
% of Non-Detects	75	89	97	77	75	100	75	100	97	100	100	97	100	97	100	100	100	100	97
% of Detects at or above Env Standards	3	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0
% of Results Below Env Standards or Non-Detect	97	100	100	100	100	100	97	100	100	100	100	100	100	100	100	100	100	100	100

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards
HEPA, March 2025, PFAS NEMP 2025 Freshwater and Interim Marine 95%
JBRF/HMAS Creswell OMP Site Specific Criteria

					yl Carboxylic Acids					PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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					0.0005	0.0005	0.0005	0.0005	0.0005	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 2025 Freshwater and Interim Marine 95%																				
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																
Receptor	0021_MW114	12 Apr 2018	BB_MW01_180412	ES1810721	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
		15 May 2018	BB_MW01_180515	ES1814324	<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
		12 Feb 2019	BB_MW01_190212	ES1905115	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	0.010	<0.001
		29 May 2019	BB_MW01_190529	ES1916831	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
		22 Oct 2021	0021_MW114_211022	ES2138639	<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
		06 Apr 2022	0021_MW114_220406	ES2212442	<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
			0021_QC107_220406	ES2212442	<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
		10 Oct 2022	0021_MW114_221010	ES2237106	<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
		18 Apr 2023	0021_MW114_230418	ES2313364	<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
		17 Oct 2023	0021_MW114_231017	ES2336398	<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
		09 Apr 2024	0021_MW114_240409	ES2411994	<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
		26 Oct 2024	0021_MW114_241026	ES2435541	<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
		04 Apr 2025	0021_MW114_250404	ES2510113	<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
			0021_QC109_250404	ES2510113	<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
			0021_QC209_250404	1210052	<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	<0.01	<0.05	<0.01
	0021_MW115	12 Apr 2018	BB_MW02_180412	ES1810721	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
		16 May 2018	BB_MW02_180516	ES1814324	<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
			BB_QC116_180516	ES1814324	<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
			BB_QC217_180516	599245	<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	<0.01	<0.05	<0.01
		12 Feb 2019	BB_MW02_190212	ES1905115	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	0.001	<0.001
		30 May 2019	0021_QC101_190530	ES1916831	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
			BB_MW02_190530	ES1916831	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
		22 Oct 2021	0021_MW115_211022	ES2138639	<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
		17 Oct 2023	0021_MW115_231017	ES2336398	<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
		11 Apr 2024	0021_MW115_240411	ES2411994	<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
	0021_SW083	19 Mar 2018	UN3_SW03_180319	ES1808818	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	0.003	<0.001
		17 May 2018	UN3_SW03_180517	ES1814324	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
		22 Oct 2021	0021_SW083_211022	ES2138639	<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
		10 Oct 2022	0021_SW083_221010	ES2237106	<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
		18 Apr 2023	0021_SW083_230418	ES2313364	<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
		17 Oct 2023	0021_SW083_231017	ES2336399	<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
		09 Apr 2024	0021_SW083_240409	ES2412012	<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
		25 Oct 2024	0021_SW083_241025	ES2435541	<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
		04 Apr 2025	0021_SW083_250404	ES2510623	<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
	0021_SW212	25 Oct 2024	0021_SW212_241025	ES2435541	-	<0.0005	-	-	-	-	-	-	-	-	-	-	<0.001	<0.001	<0.001	<0.001
		04 Apr 2025	0021_SW212_250404	ES2510623	<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

	yl Carboxylic Acids					PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
	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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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	0.0005	0.0005	0.0005	0.0005	0.0005	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 2025 Freshwater and Interim Marine 95%																

Statistics

Number of Results	35	36	35	35	35	35	35	35	35	35	35	35	36	36	36	36
Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
Minimum Concentration	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	0.001	<0.001
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.001	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	0.01	ND
Average Concentration *	0.0072	0.007	0.017	0.0072	0.0072	0.019	0.0084	0.019	0.019	0.0084	0.019	0.0084	0.017	0.017	0.019	0.017
Geometric Average *	0.0037	0.0035	0.007	0.0037	0.0037	0.0091	0.0041	0.0091	0.0091	0.0041	0.0091	0.0041	0.0077	0.0077	0.0098	0.0077
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 *	0.0043	0.0044	0.011	0.0043	0.0043	0.011	0.006	0.011	0.011	0.006	0.011	0.006	0.011	0.011	0.011	0.011
Geometric Standard Deviation *	5.1	5.3	7.6	5.1	5.1	5.7	5.4	5.7	5.7	5.4	5.7	5.4	5.8	5.8	5	5.8
95% UCL (Student's-t) *	0.00844	0.00825	0.0207	0.00844	0.00844	0.0218	0.0101	0.0218	0.0218	0.0101	0.0218	0.0101	0.0203	0.0203	0.0215	0.0203
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	8	0
% of Non-Detects	100	100	100	100	100	100	100	100	100	100	100	100	100	100	92	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.

Environmental Standards
HEPA, March 2025, PFAS NEMP 2025 Freshwater and Interim Marine 95%
JBRF/HMAS Creswell OMP Site Specific Criteria

				PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids									
				Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL				0.0001	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	0.01	0.002	0.0005	0.0005
PFAS NEMP 2025 Freshwater and Interim Marine 95%				0.13[#1]		220[#1]															
PFAS NEMP 2025 Recreational water quality				2[#2]	2[#2]	10[#2]	2[#2]														
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																	
Source	0020_MW052	21 Dec 2021	0020_MW052_211221	ES2147062	0.01	0.12	<0.01	0.13	0.13	0.13	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Source	0020_MW052	31 Mar 2025	0020_MW052_250331	ES2510618	0.02	0.02	<0.01	0.04	0.04	0.04	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Source	0021_MW028	03 May 2017	MW028	ES1710866	0.0023	0.0018	<0.0005	0.0041	0.0041	0.0041	-	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	-	<0.002	<0.0005	<0.0005
Source	0021_MW028	20 Oct 2021	0021_MW028_211020	ES2138639	0.13	0.13	<0.01	0.26	0.32	0.32	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Source	0021_MW028	20 Oct 2021	0021_QC103_211020	ES2138639	0.13	0.14	<0.01	0.27	0.33	0.33	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Source	0021_MW028	06 Apr 2022	0021_MW028_220406	ES2212442	0.16	0.10	<0.01	0.26	0.30	0.30	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Source	0021_MW028	06 Apr 2022	0021_QC204_220406	293031	0.31	0.31	0.01	0.62	0.87	-	0.32	-	0.02	<0.02	-	<0.01	-	0.03	-	0.03	<0.02	<0.05
Source	0021_MW028	14 Oct 2022	0021_MW028_221014	ES2237106	0.19	0.30	0.01	0.49	0.71	0.69	-	-	<0.02	<0.02	-	<0.02	-	0.02	-	<0.1	<0.02	<0.02
Source	0021_MW028	21 Apr 2023	0021_MW028_230421	ES2313364	0.71	1.15	0.04	1.86	2.47	2.34	-	-	0.06	<0.02	-	0.03	-	0.10	-	<0.1	<0.02	<0.02
Source	0021_MW028	19 Oct 2023	0021_MW028_231019	ES2336398	0.16	0.30	0.01	0.46	0.63	0.61	-	-	<0.02	<0.02	-	<0.02	-	0.02	-	<0.1	<0.02	<0.02
Source	0021_MW028	12 Apr 2024	0021_MW028_240412	ES2411994	0.20	0.24	0.01	0.44	0.56	0.54	-	-	<0.02	<0.02	-	<0.02	-	0.02	-	<0.1	<0.02	<0.02
Source	0021_MW028	22 Oct 2024	0021_MW028_241022	ES2435078	0.09	0.18	<0.01	0.27	0.49	0.47	-	-	<0.02	<0.02	-	<0.02	-	0.02	-	<0.1	<0.02	<0.02
Source	0021_MW028	22 Oct 2024	0021_QC103_241022	ES2435078	0.10	0.18	<0.01	0.28	0.51	0.49	-	-	0.02	<0.02	-	<0.02	-	0.02	-	<0.1	<0.02	<0.02
Source	0021_MW028	22 Oct 2024	0021_QC203_241022	1154751	0.11	0.24	0.01	0.35	0.56	0.54	0.12	0.36	0.02	<0.01	<0.01	<0.01	<0.01	0.02	-	<0.05	<0.01	<0.01
Source	0021_MW028	02 Apr 2025	0021_MW028_250402	ES2510113	0.50	1.03	0.04	1.53	2.79	2.63	-	-	0.10	<0.02	-	0.02	-	0.10	-	0.1	<0.02	<0.02
Source	0021_MW030	03 May 2017	MW030	ES1710866	0.0021	0.0012	<0.0005	0.0033	0.0033	0.0033	-	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	-	<0.002	<0.0005	<0.0005
Source	0021_MW030	21 Oct 2021	0021_MW030_211021	ES2138639	<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
Source	0021_MW030	06 Apr 2022	0021_MW030_220406	ES2212442	<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
Source	0021_MW030	14 Oct 2022	0021_MW030_221014	ES2237106	<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
Source	0021_MW030	19 Apr 2023	0021_MW030_230419	ES2313364	<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
Source	0021_MW030	18 Oct 2023	0021_MW030_231018	ES2336398	<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
Source	0021_MW030	10 Apr 2024	0021_MW030_240410	ES2411994	<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
Source	0021_MW030	24 Oct 2024	0021_MW030_241024	ES2435541	<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
Source	0021_MW030	03 Apr 2025	0021_MW030_250403	ES2510113	0.04	0.02	<0.01	0.06	0.06	0.06	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Source	0021_MW030	03 Apr 2025	0021_QC255_250403	1210052	<0.01	<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	-	<0.05	<0.01	<0.01
Source	0021_MW062	21 Jun 2021	0021_MW062_210621	ES2123994	456	36.2	3.26	492	517	511	-	-	1.90	0.06	-	3.21	-	2.59	-	0.8	<0.02	<0.02
Source	0021_MW062	21 Jun 2021	0021_QC113_210621	ES2123994	435	37.4	3.22	472	499	493	-	-	1.83	0.05	-	3.46	-	2.70	-	0.8	<0.02	<0.02
Source	0021_MW062	11 Apr 2024	0021_MW062_240411	ES2411994	78.4	18.5	1.37	96.9	109	106	-	-	0.98	0.11	-	1.22	-	1.14	-	0.4	0.05	<0.02
Source	0021_MW062	24 Oct 2024	0021_MW062_241024	ES2435541	60.0	12.4	1.25	72.4	83.1	80.8	-	-	0.80	0.07	-	0.84	-	0.71	-	0.3	0.04	<0.02
Source	0021_MW062	25 Oct 2024	0021_QC157_241025	ES2435541	46.2	10.1	1.11	56.3	67.0	63.5	-	-	0.66	0.10	-	1.53	-	1.08	-	0.3	0.04	<0.02
Source	0021_MW062	29 Jan 2025	0021_MW062_250129	ES2503552	57.9	16.8	1.35	74.7	87.4	83.3	-	-	0.84	0.12	0.66	1.61	0.31	1.33	-	0.3	<0.02	<0.02
Source	0021_MW062	24 Apr 2025	0021_MW062_250424	ES2512435	0.63	0.19	<0.01	0.82	0.82	0.82	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Source	0021_MW102	01 May 2017	A_MW02	ES1710866	0.243	6.06	0.844	6.30	12.1	9.98	-	-	1.27	<0.0005	-	0.796	-	1.36	-	<0.002	<0.0005	<0.0005
Source	0021_MW102	19 Oct 2021	0021_MW102_211019	ES2138639	7.07	3.82	0.23	10.9	13.8	13.0	-	-	0.31	<0.02	-	0.47	-	0.35	-	0.1	<0.02	<0.02
Source	0021_MW102	19 Oct 2021	0021_QC201_211019	281322	8.8	3.9	0.26	13	16	-	9.0	-	0.33	<0.02	-	0.58	-	0.37	-	0.1	<0.02	<0.05
Source	0021_MW102	05 Apr 2022	0021_MW102_220405	ES2212442	13.9	5.31	0.37	19.2	23.4	22.0	-	-	0.67	<0.02	-	0.76	-	0.65	-	0.1	<0.02	<0.02
Source	0021_MW102	13 Oct 2022	0021_MW102_221013	ES2237106	8.00	2.29	0.16	10.3	11.8	11.3	-	-	0.17	<0.02	-	0.27	-	0.20	-	<0.1	<0.02	<0.02
Source	0021_MW102	20 Apr 2023	0021_MW102_230420	ES2313364	10.3	5.98	0.45	16.3	20.8	19.5	-	-	0.49	<0.02	-	0.62	-	0.63	-	0.2	<0.02	<0.02
Source	0021_MW102	20 Apr 2023	0021_QC109_230420	ES2313364	6.16	3.16	0.24	9.32	11.7	10.8	-	-	0.20	<0.02	-	0.35	-	0.48	-	0.2	<0.02	<0.02
Source	0021_MW102	20 Apr 2023	0021_QC209_230420	321517	6.8	4.6	0.30	11	15	-	7.1	-	0.31	<0.02	-	0.46	-	0.41	-	0.1	<0.02	<0.05
Source	0021_MW102	19 Oct 2023	0021_MW102_231019	ES2336398	10.2	3.17	0.32	13.4	16.2	15.6	-	-	0.29	<0.02	-	0.40	-	0.26	-	0.1	<0.02	<0.02
Source	0021_MW102	10 Apr 2024	0021_MW102_240410	ES2411994	5.73	3.19	0.25	8.92	11.6	10.8	-	-	0.31	<0.02	-	0.34	-	0.32	-	0.1	<0.02	<0.02
Source	0021_MW102	24 Oct 2024	0021_MW102_241024	ES2435541	3.34	4.48	0.38	7.82	11.6	10.6	-	-	0.48	<0.02	-	0.37	-	0.46	-	0.2	<0.02	<0.02
Source	0021_MW102	04 Apr 2025	0021_MW102_250404	ES2510113	5.64	2.99	0.17	8.63	11.3	10.5	-	-	0.35	<0.02	-	0.26	-	0.36	-	0.1	<0.02	<0.02
Source	0021_MW109	08 May 2017	A_MW09	ES1711220	0.114	0.278	0.0048	0.392	0.411	0.4	-	-	0.0014	<0.0005	-	0.0076	-	0.0035	-	<0.002	<0.0005	<0.0005
Source	0021_MW109	19 Oct 2021	0021_MW109_211019	ES2138639	2.04	1.45	0.06	3.49	4.24	4.10	-	-	0.06	<0.02	-	0.03	-	0.11	-	<0.1	<0.02	<0.02
Source	0021_MW109	06 Apr 2022	0021_MW109_220406	ES2212442	1.07	1.14	0.04	2.21	2.74	2.62	-	-	0.06	<0.02	-	0.03	-	0.09	-	<0.1	<0.02	<0.02
Source	0021_MW109	13 Oct 2022	0021_MW109_221013	ES2237106	1.49	0.75	0.03	2.24	2.49	2.42	-	-	<0.02	<0.02	-	0.03	-	0.04	-	<0.1	<0.02	<0.02
Source	0021_MW109	13 Oct 2022	0021_QC209_221013	308187	1.2	0.66	0.03	1.9	2.2	-	1.3	-	0.01	<0.02	-	0.03	-	0.04	-	<0.02	<0.02	<0.05
Source	0021_MW109	20 Apr 2023	0021_MW109_230420	ES2313364	1.48	1.29	0.04	2.77	3.32	3.19	-	-	0.05	<0.02	-	0.04	-	0.09	-	<0.1	<0.02	<0.02
Source	0021_MW109	18 Oct 2023	0021_MW109_231018	ES2336398	1.01	1.08	0.04	2.09	2.65	2.55	-	-	0.05	<0.02	-	0.03	-	0.07	-	0.1	<0.02	<0.02
Source	0021_MW109	10 Apr 2024	0021_MW109_240410	ES2411994	1.48	0.67	0.03	2.15	2.52	2.45	-	-	0.04	<0.02	-	0.02	-	0.05	-	<0.1	<0.02	<0.02
Source	0021_MW109	24 Oct 2024	0021_MW109_241024	ES2435541	0.71	0.45	0.02	1.16	1.34	1.32	-	-	0.03	<0.02	-	<0.02	-	0.02	-	<0.1	<0.02	<0.02
Source	0021_MW109	24 Oct 2024	0021_QC256_241024	1156146	0.92	0.65	0.02	1.57	1.83	1.77	0.94	1.59	0.03	<0.01	<0.01	0.02	<0.01	0.04	-	<0.05	<0.01	<0.01
Source	0021_MW109	31 Jan 2025	0021_MW109_250131	ES2503552	0.74	0.73	0.02	1.47	1.67	1.62	-	-	0.03	<0.02	<0.02	<0.02	<0.02	0.05	-	<0.1	<0.02	<0.02
Source	0021_MW109	03 Apr 2025	0021_MW109_250403	ES2510113	1.78	0.94	0.04	2.72	3.25	3.14	-	-	0.05	<0.02	-	0.04	-	0.07	-	<0.1	<0.02	<0.02
Source	0021_MW119	03 May 2017	C_MW03	ES1710866	<0.0003	0.0006	<0.0005	0.0006	0.0006	0.0006	-	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	-	<0.002	<0.0005	<0.0005
Source	0021_MW119	20 Oct 2021	0021_MW119_211020	ES2138639	0.02	<0.01	<0.01	0.02	0.02	0.02	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Source	0021_MW119	20 Oct 2021	0021_QC202_211020	281322	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.01	<0.02	-	<0.01	-	<0.01	-	<0.02	<0.02	<0.05
Source	0021_MW119	06 Apr 2022	0021_MW119_220406	ES2212442	<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
Source	0021_MW119	11 Oct 2022	0021_MW119_221011	ES2237106	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

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids									
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL					0.0001	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	0.01	0.002	0.0005	0.0005
PFAS NEMP 2025 Freshwater and Interim Marine 95%					0.13[#1]		220[#1]															
PFAS NEMP 2025 Recreational water quality					2[#2]	2[#2]	10[#2]	2[#2]														
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																		
Source	0021_MW119	03 Feb 2023	0021_MW119_230203	ES2303695	<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
Source	0021_MW119	21 Apr 2023	0021_MW119_230421	ES2313364	<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
Source	0021_MW119	19 Oct 2023	0021_MW119_231019	ES2336398	<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
Source	0021_MW119	12 Apr 2024	0021_MW119_240412	ES2411994	<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
Source	0021_MW119	22 Oct 2024	0021_MW119_241022	ES2435078	<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
Source	0021_MW119	02 Apr 2025	0021_MW119_250402	ES2510113	<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
Source	0021_MW120	03 May 2017	C_MW04	ES1710866	0.0092	0.221	0.0027	0.230	0.416	0.343	-	-	0.0591	<0.0005	-	0.0026	-	0.0706	-	<0.002	<0.0005	<0.0005
Source	0021_MW120	20 Oct 2021	0021_MW120_211020	ES2138639	0.48	0.61	0.01	1.09	1.34	1.28	-	-	0.06	<0.02	-	<0.02	-	0.06	-	<0.1	<0.02	<0.02
Source	0021_MW120	20 Oct 2021	0021_QC102_211020	ES2138639	0.46	0.64	0.01	1.10	1.34	1.28	-	-	0.05	<0.02	-	<0.02	-	0.06	-	<0.1	<0.02	<0.02
Source	0021_MW120	14 Oct 2022	0021_MW120_221014	ES2237106	0.22	0.24	<0.01	0.46	0.56	0.52	-	-	0.03	<0.02	-	<0.02	-	0.04	-	<0.1	<0.02	<0.02
Source	0021_MW120	21 Apr 2023	0021_MW120_230421	ES2313364	0.91	2.02	0.03	2.93	3.95	3.61	-	-	0.14	<0.02	-	0.04	-	0.30	-	<0.1	<0.02	<0.02
Source	0021_MW120	19 Oct 2023	0021_MW120_231019	ES2336398	1.66	2.77	0.07	4.43	5.40	5.09	-	-	0.14	<0.02	-	0.09	-	0.22	-	<0.1	<0.02	<0.02
Source	0021_MW120	12 Apr 2024	0021_MW120_240412	ES2411994	0.43	0.89	0.02	1.32	1.92	1.71	-	-	0.14	<0.02	-	<0.02	-	0.16	-	<0.1	<0.02	<0.02
Source	0021_MW120	22 Oct 2024	0021_MW120_241022	ES2435078	0.47	1.31	0.04	1.78	2.43	2.18	-	-	0.09	<0.02	-	0.04	-	0.17	-	<0.1	<0.02	<0.02
Source	0021_MW120	02 Apr 2025	0021_MW120_250402	ES2510113	1.08	2.00	0.05	3.08	3.79	3.50	-	-	0.11	<0.02	-	0.07	-	0.18	-	<0.1	<0.02	<0.02
Source	0021_MW121	03 May 2017	C_MW05	ES1710866	0.0102	0.118	0.0015	0.128	0.170	0.152	-	-	0.0142	<0.0005	-	0.0019	-	0.0157	-	<0.002	<0.0005	<0.0005
Source	0021_MW121	22 Oct 2021	0021_MW121_211022	ES2138639	0.02	0.02	<0.01	0.04	0.04	0.04	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Source	0021_MW121	14 Oct 2022	0021_MW121_221014	ES2237106	0.04	0.30	<0.01	0.34	0.39	0.37	-	-	<0.02	<0.02	-	<0.02	-	0.02	-	<0.1	<0.02	<0.02
Source	0021_MW121	01 Feb 2023	0021_MW121_230201	ES2303446	0.06	0.28	<0.01	0.34	0.40	0.38	-	-	<0.02	<0.02	-	<0.02	-	0.02	-	<0.1	<0.02	<0.02
Source	0021_MW121	01 Feb 2023	0021_QC202_230201	961655	0.06[#3]	0.25[#3]	<0.01	0.31	0.4	0.38	0.06	0.31	0.02	<0.01	<0.01	<0.01	<0.01	0.02	-	<0.05	<0.01	<0.01
Source	0021_MW121	20 Apr 2023	0021_MW121_230420	ES2313364	0.05	0.14	<0.01	0.19	0.19	0.19	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Source	0021_MW121	18 Oct 2023	0021_MW121_231018	ES2336398	0.02	0.10	<0.01	0.12	0.12	0.12	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Source	0021_MW121	18 Oct 2023	0021_QC112_231018	ES2336399	0.02	0.09	<0.01	0.11	0.11	0.11	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Source	0021_MW121	18 Oct 2023	0021_QC212_231018	335876	0.03	0.05	<0.01	0.08	0.19	-	0.03	-	<0.01	<0.02	-	<0.01	-	<0.01	-	<0.02	<0.02	<0.05
Source	0021_MW121	10 Apr 2024	0021_MW121_240410	ES2411994	0.02	0.02	<0.01	0.04	0.04	0.04	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Source	0021_MW121	10 Apr 2024	0021_QC111_240410	ES2411994	0.03	0.03	<0.01	0.06	0.06	0.06	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Source	0021_MW121	10 Apr 2024	0021_QC211_240410	348825	0.02	0.02	<0.01	0.05	0.05	-	0.02	-	<0.01	<0.02	-	<0.01	-	<0.01	-	<0.02	<0.02	<0.05
Source	0021_MW121	24 Oct 2024	0021_MW121_241024	ES2435541	0.02	0.15	<0.01	0.17	0.17	0.17	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Source	0021_MW121	02 Apr 2025	0021_MW121_250402	ES2510113	0.02	0.10	<0.01	0.12	0.12	0.12	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Source	0021_MW123	08 May 2017	C_MW07	ES1711220	0.227	2.8	0.0697	3.03	4.62	4.06	-	-	0.322	<0.0005	-	0.0724	-	0.486	-	<0.002	<0.0005	<0.0005
Source	0021_MW123	26 Oct 2021	0021_MW123_211026	ES2138639	0.41	1.70	0.10	2.11	3.10	2.64	-	-	0.12	<0.02	-	0.21	-	0.25	-	<0.1	<0.02	<0.02
Source	0021_MW123	06 Apr 2022	0021_MW123_220406	ES2212442	0.27	0.55	0.04	0.82	1.14	1.01	-	-	0.05	<0.02	-	0.06	-	0.07	-	<0.1	<0.02	<0.02
Source	0021_MW123	14 Oct 2022	0021_MW123_221014	ES2237106	0.85	0.99	0.06	1.84	2.44	2.16	-	-	0.07	<0.02	-	0.13	-	0.15	-	<0.1	<0.02	<0.02
Source	0021_MW123	21 Apr 2023	0021_MW123_230421	ES2313364	1.07	1.28	0.08	2.35	3.16	2.81	-	-	0.10	<0.02	-	0.15	-	0.20	-	<0.1	<0.02	<0.02
Source	0021_MW123	19 Oct 2023	0021_MW123_231019	ES2336398	0.63	1.35	0.09	1.98	2.79	2.48	-	-	0.10	<0.02	-	0.12	-	0.19	-	<0.1	<0.02	<0.02
Source	0021_MW123	12 Apr 2024	0021_MW123_240412	ES2411994	1.02	1.17	0.10	2.19	2.90	2.60	-	-	0.07	<0.02	-	0.12	-	0.18	-	<0.1	<0.02	<0.02
Source	0021_MW123	22 Oct 2024	0021_MW123_241022	ES2435078	0.82	0.99	0.08	1.81	2.54	2.23	-	-	0.08	<0.02	-	0.12	-	0.19	-	<0.1	<0.02	<0.02
Source	0021_MW123	02 Apr 2025	0021_MW123_250402	ES2510113	0.70	1.03	0.07	1.73	2.30	2.06	-	-	0.06	<0.02	-	0.11	-	0.13	-	<0.1	<0.02	<0.02
Source	0021_MW127	04 May 2017	FC_MW03	ES1711220	0.198	0.328	0.013	0.526	0.657	0.6	-	-	0.03	<0.0005	-	0.0179	-	0.0386	-	<0.002	<0.0005	<0.0005
Source	0021_MW127	11 Apr 2022	0021_MW127_220411	ES2213156	0.34	0.39	0.01	0.73	0.92	0.86	-	-	0.06	<0.02	-	<0.02	-	0.06	-	<0.1	<0.02	<0.02
Source	0021_MW127	11 Oct 2022	0021_MW127_221011	ES2236834	0.22	0.31	0.01	0.53	0.70	0.65	-	-	0.05	<0.02	-	<0.02	-	0.05	-	<0.1	<0.02	<0.02
Source	0021_MW127	11 Oct 2022	0021_QC225_221012	931500	0.27[#3]	0.32[#3]	0.01[#3]	0.59	0.81	0.73	0.28	0.6	0.06	<0.01	-	0.01	0.02	0.05[#3]	<0.01	<0.05	<0.01	<0.01
Source	0021_MW127	01 Feb 2023	0021_MW127_230201	ES2303446	0.23	0.37	0.01	0.60	0.78	0.72	-	-	0.05	<0.02	-	<0.02	-	0.06	-	<0.1	<0.02	<0.02
Source	0021_MW127	01 Feb 2023	0021_QC102_230201	ES2303446	0.21	0.30	0.01	0.51	0.66	0.61	-	-	0.04	<0.02	-	<0.02	-	0.05	-	<0.1	<0.02	<0.02
Source	0021_MW127	24 Oct 2024	0021_MW127_241024	ES2435541	0.25	0.42	0.02	0.67	0.88	0.82	-	-	0.05	<0.02	-	<0.02	-	0.06	-	<0.1	<0.02	<0.02
Source	0021_MW127	02 Apr 2025	0021_MW127_250402	ES2510113	0.64	0.73	0.03	1.37	1.75	1.61	-	-	0.07	<0.02	-	0.03	-	0.08	-	<0.1	<0.02	<0.02
Source	0021_SW001	20 Apr 2017	AB_SW01	ES1709644	2.97	3.33	0.102	6.30	7.89	7.66	-	-	0.264	0.0031	-	0.122	-	0.0920	-	<0.002	0.0020	<0.0005
Source	0021_SW001	19 Oct 2021	0021_QC101_211019	ES2138639	13.1	10.5	0.41	23.6	30.9	29.0	-	-	0.56	0.11	-	0.53	-	1.21	-	0.2	0.03	<0.02
Source	0021_SW001	19 Oct 2021	0021_SW001_211019	ES2138639	12.4	9.80	0.43	22.2	29.5	27.5	-	-	0.52	0.10	-	0.58	-	1.26	-	0.2	0.03	<0.02
Source	0021_SW001	05 Apr 2022	0021_QC101_220405	ES2212442	3.71	2.79	0.14	6.50	8.37	8.04	-	-	0.20	<0.02	-	0.12	-	0.21	-	<0.1	<0.02	<0.02
Source	0021_SW001	05 Apr 2022	0021_SW001_220405	ES2212442	3.48	2.24	0.12	5.72	7.32	7.04	-	-	0.20	<0.02	-	0.09	-	0.19	-	<0.1	<0.02	<0.02
Source	0021_SW001	07 Jul 2022	0021_QC101_220707	ES2224473	7.77	3.38	0.15	11.2	12.7	12.2	-	-	0.14	0.04	-	0.16	-	0.24	-	<0.1	<0.02	<0.02
Source	0021_SW001	07 Jul 2022	0021_QC201_220707	905309	9.0[#3]	3.8[#3]	0.15[#3]	12.8	14.23	13.86	9.15	12.95	0.13	<0.01	-	0.10[#3]	0.04	0.18[#3]	0.03	<0.05	0.01	<0.01
Source	0021_SW001	07 Jul 2022	0021_SW001_220101	ES2224473	7.68	4.03	0.17	11.7	13.4	13.0	-	-	0.15	0.03	-	0.18	-	0.29	-	<0.1	<0.02	<0.02
Source	0021_SW001	11 Oct 2022	0021_SW001_221011	ES2236834	3.60	1.13	0.07	4.73	5.38	5.19	-	-	0.07	<0.02	-	0.09	-	0.10	-	<0.1	<0.02	<0.02
Source	0021_SW001	13 Oct 2022	0021_SW001_221013	ES2237106	4.91	2.41	0.12	7.32	8.54	8.23	-	-	0.12	<0.02	-	0.12	-	0.19	-	<0.1	<0.02	<0.02
Source	0021_SW001	01 Feb 2023	0021_SW001_230201	ES2303446	4.27	2.02	0.10	6.29	7.34	7.05	-	-	0.11	0.02	-	0.11	-	0.16	-	<0.1	<0.02	<0.02
Source	0021_SW001	20 Apr 2023	0021_SW001_230420	ES2313364	9.25	6.39	0.23	15.6	18.6	17.9	-	-	0.36	0.03	-	0.21	-	0.47	-	0.1	<0.02	<0.02
Source	0021_SW001	07 Aug 2023	0021_SW001_230807	ES2326593	1.16	0.40	0.02	1.56	1.81	1.75	-	-	0.02	<0.02	-	0.03	-	0.03	-	<0.1	<0.02	<0.02
Source	0021_SW001	04 Oct 2023	0021_SW001_231004	ES2334226	1.85	0.74	0.05	2.59	3.18	3.09	-	-	0.03	<0.02	-	0.05	-	0.04	-	0.2	<0.02	<0.02
Source	0021_SW001	18 Oct 2023	0021_SW001_231018	ES2336399	2.07	1.19	0.05	3.26	3.92	3.79	-	-	0.06	<0.02	-	0.05	-	0.08	-	<0.1	<0.02	<0.02

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids									
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL					0.0001	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	0.01	0.002	0.0005	0.0005
PFAS NEMP 2025 Freshwater and Interim Marine 95%					0.13[#1]		220[#1]															
PFAS NEMP 2025 Recreational water quality					2[#2]	2[#2]	10[#2]	2[#2]														
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																		
Source	0021_SW001	10 Apr 2024	0021_SW001_240410	ES2412012	2.84	1.96	0.08	4.80	5.77	5.48	-	-	0.10	<0.02	-	0.07	-	0.16	-	<0.1	<0.02	<0.02
Source	0021_SW001	03 Apr 2025	0021_SW001_250403	ES2510622	3.08	8.35	0.24	11.4	15.2	14.2	-	-	0.39	<0.02	-	0.18	-	0.65	-	<0.1	<0.02	<0.02
Source	0021_SW027	19 Apr 2017	FC_SW11	ES1709535	0.0769	0.0628	0.0037	0.14	0.179	0.169	-	-	0.0137	<0.0005	-	0.0026	-	0.008	-	<0.002	<0.0005	<0.0005
Source	0021_SW027	21 Oct 2021	0021_SW027_211021	ES2138639	0.15	0.08	<0.01	0.23	0.23	0.23	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Source	0021_SW027	06 Apr 2022	0021_SW027_220406	ES2212442	0.03	0.02	<0.01	0.05	0.05	0.05	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Source	0021_SW027	12 Oct 2022	0021_SW027_221012	ES2237106	0.17	0.12	<0.01	0.29	0.32	0.32	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Source	0021_SW027	20 Apr 2023	0021_SW027_230420	ES2313364	0.17	0.54	<0.01	0.71	0.92	0.83	-	-	0.06	<0.02	-	<0.02	-	0.09	-	<0.1	<0.02	<0.02
Source	0021_SW027	10 Apr 2024	0021_SW027_240410	ES2412012	0.13	0.09	<0.01	0.22	0.22	0.22	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Source	0021_SW027	01 Apr 2025	0021_SW027_250401	ES2510622	0.14	0.09	<0.01	0.23	0.23	0.23	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Source	0021_SW111	10 Aug 2020	0021_SW111_200810	ES2028286	3.17	1.96	0.0725	5.13	6.10	5.87	-	-	0.112	0.0022	-	0.0688	-	0.143	-	0.040	0.0010	<0.0005
Source	0021_SW111	06 Apr 2022	0021_SW111_220406	ES2212442	<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
Source	0021_SW111	13 Oct 2022	0021_SW111_221013	ES2237106	0.12	0.10	0.01	0.22	0.46	0.46	-	-	0.05	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Source	0021_SW111	20 Apr 2023	0021_SW111_230420	ES2313364	0.08	0.07	<0.01	0.15	0.28	0.28	-	-	0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0020_MW012	17 Apr 2023	0020_MW012_230417	ES2313254	5.86	2.14	0.13	8.00	8.79	8.52	-	-	0.04	<0.02	-	0.12	-	0.13	-	<0.1	<0.02	<0.02
Pathway	0020_MW012	16 Oct 2023	0020_MW012_ 231016	ES2336397	4.64	0.98	0.08	5.62	6.05	5.92	-	-	0.03	<0.02	-	0.07	-	0.06	-	<0.1	<0.02	<0.02
Pathway	0020_MW012	08 Apr 2024	0020_MW012_240408	ES2411964	7.22	1.26	0.07	8.48	8.97	8.77	-	-	0.05	<0.02	-	0.08	-	0.09	-	<0.1	<0.02	<0.02
Pathway	0020_MW012	08 Apr 2024	0020_QC101_240408	ES2411964	7.18	1.43	0.06	8.61	9.10	8.92	-	-	0.05	<0.02	-	0.10	-	0.08	-	<0.1	<0.02	<0.02
Pathway	0020_MW012	08 Apr 2024	0020_QC201_240408	348827	6.5	1.3	0.07	7.9	8.3	-	6.6	-	0.06	<0.02	-	0.08	-	0.08	-	<0.02	<0.02	<0.05
Pathway	0020_MW012	21 Oct 2024	0020_MW012_241021	ES2435143	3.96	1.75	0.11	5.71	6.29	6.09	-	-	0.03	<0.02	-	0.12	-	0.08	-	<0.1	<0.02	<0.02
Pathway	0020_MW012	21 Oct 2024	0020_QC100_241021	ES2435143	3.65	1.47	0.10	5.12	5.66	5.47	-	-	0.03	<0.02	-	0.12	-	0.07	-	<0.1	<0.02	<0.02
Pathway	0020_MW012	21 Oct 2024	0020_QC200_241021	1154740	6.0	1.7	0.11	7.7	8.31	8.09	6.11	7.81	0.04	<0.01	0.02	0.13	<0.01	0.07	-	<0.05	<0.01	<0.01
Pathway	0020_MW012A	10 Apr 2018	0020_MW12_180410	ES1810721	3.93	1.30	0.0627	5.23	5.88	5.58	-	-	0.0508	<0.0005	-	0.149	-	0.138	-	<0.002	0.0011	<0.0005
Pathway	0020_MW012A	03 May 2018	0020_MW12_180503	ES1812871	4.00	1.30	0.06	5.30	5.80	5.65	-	-	0.05	<0.02	-	0.06	-	0.09	-	<0.1	<0.02	<0.02
Pathway	0020_MW012A	15 Oct 2021	0020_MW012_211015	ES2138638	4.30	1.54	0.07	5.84	6.39	6.20	-	-	0.07	<0.02	-	0.08	-	0.11	-	<0.1	<0.02	<0.02
Pathway	0020_MW012A	04 Apr 2022	0020_MW012_220404	ES2212597	3.46	0.63	0.07	4.09	4.50	4.44	-	-	0.02	<0.02	-	0.04	-	0.02	-	<0.1	<0.02	<0.02
Pathway	0020_MW012A	10 Oct 2022	0020_MW012_221010	ES2237104	4.04	1.07	0.09	5.11	5.65	5.52	-	-	0.04	<0.02	-	0.08	-	0.05	-	<0.1	<0.02	<0.02
Pathway	0020_MW012A	30 Jan 2023	0020_MW012A_230130	ES2303447	5.56	1.41	0.11	6.97	7.59	7.41	-	-	0.04	<0.02	-	0.11	-	0.07	-	<0.1	<0.02	<0.02
Pathway	0020_MW012A	08 Apr 2025	0020_MW012_250408	ES2510618	3.41	1.16	0.05	4.57	4.89	4.77	-	-	0.03	<0.02	-	0.06	-	0.06	-	<0.1	<0.02	<0.02
Pathway	0020_MW055	12 Apr 2022	0020_MW055_220412	ES2213152	0.07	0.33	<0.01	0.40	0.47	0.47	-	-	0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0020_MW055	10 Oct 2022	0020_MW055_221010	ES2236866	0.13	0.08	<0.01	0.21	0.21	0.21	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0020_MW055	31 Jan 2023	0020_MW055_230131	ES2303447	0.08	0.07	<0.01	0.15	0.15	0.15	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0020_MW056	12 Apr 2022	0020_MW056_220412	ES2213152	0.99	0.18	0.02	1.17	1.27	1.27	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0020_MW056	10 Oct 2022	0020_MW056_221010	ES2236866	1.17	0.22	<0.01	1.39	1.41	1.41	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0020_MW056	10 Oct 2022	0020_QC122_221010	ES2236866	1.19	0.21	<0.01	1.40	1.42	1.42	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0020_MW056	30 Jan 2023	0020_MW056_230130	ES2303447	0.20	0.11	<0.01	0.31	0.33	0.33	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0020_MW056	21 Oct 2024	0020_MW056_241021	ES2435143	0.18	0.11	<0.01	0.29	0.29	0.29	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0020_MW057	12 Apr 2022	0020_MW057_220412	ES2213152	1.43	0.25	0.03	1.68	1.95	1.95	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0020_MW057	10 Oct 2022	0020_MW057_221010	ES2236866	1.27	0.29	0.03	1.56	1.72	1.72	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0020_MW057	30 Jan 2023	0020_MW057_230130	ES2303447	0.88	0.24	0.01	1.12	1.25	1.25	-	-	0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0020_MW057	21 Oct 2024	0020_MW057_241021	ES2435143	0.87	0.22	0.01	1.09	1.12	1.10	-	-	<0.02	<0.02	-	<0.02	-	0.02	-	<0.1	<0.02	<0.02
Pathway	0020_MW057	31 Mar 2025	0020_MW057_250331	ES2510618	0.54	0.44	<0.01	0.98	1.00	0.98	-	-	<0.02	<0.02	-	<0.02	-	0.02	-	<0.1	<0.02	<0.02
Pathway	0020_MW058	12 Apr 2022	0020_MW058_220412	ES2213152	7.30	1.59	0.20	8.89	9.74	9.49	-	-	0.03	<0.02	-	0.20	-	0.05	-	<0.1	<0.02	<0.02
Pathway	0020_MW058	12 Apr 2022	0020_QC201_220412	880529	8.0	1.5	0.19	9.5	10.29	10	8.19	9.69	0.02	<0.01	-	0.21	<0.01	0.04	0.02	<0.05	<0.01	<0.01
Pathway	0020_MW058	10 Oct 2022	0020_MW058_221010	ES2236866	5.00	0.52	0.07	5.52	5.70	5.65	-	-	<0.02	<0.02	-	0.03	-	0.02	-	<0.1	<0.02	<0.02
Pathway	0020_MW058	10 Oct 2022	0020_QC222_221010	931497	4.4[#3]	0.45[#3]	0.06[#3]	4.85	5.1	4.99	4.46	4.91	0.01	<0.01	-	0.04	<0.01	0.02[#3]	0.04	<0.05	<0.01	<0.01
Pathway	0020_MW058	30 Jan 2023	0020_MW058_230130	ES2303447	5.70	1.05	0.19	6.75	7.36	7.24	-	-	0.03	<0.02	-	0.08	-	0.04	-	<0.1	<0.02	<0.02
Pathway	0020_MW058	30 Jan 2023	0020_QC200_230130	961653	6.0[#3]	1.3[#3]	0.18[#3]	7.3	8.02	7.79	6.18	7.48	0.03	<0.01	0.05	0.12[#3]	<0.01	0.04	-	<0.05	<0.01	<0.01
Pathway	0020_MW058	21 Oct 2024	0020_MW058_241021	ES2435143	4.48	1.35	0.16	5.83	6.39	6.23	-	-	0.02	<0.02	-	0.07	-	0.04	-	<0.1	<0.02	<0.02
Pathway	0020_MW058	03 Apr 2025	0020_MW058_250403	ES2510618	2.49	0.57	0.05	3.06	3.17	3.13	-	-	<0.02	<0.02	-	0.02	-	0.02	-	<0.1	<0.02	<0.02
Pathway	0020_MW058	03 Apr 2025	0020_QC137_250403	ES2510618	2.56	0.57	0.05	3.13	3.23	3.20	-	-	<0.02	<0.02	-	0.03	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0020_MW058	03 Apr 2025	0020_QC237_250403	1209674	2.7	0.51	0.06	3.21	3.41	3.33	2.76	3.27	0.01	<0.01	0.02	0.03	<0.01	0.02	-	<0.05	<0.01	<0.01
Pathway	0020_MW059	12 Apr 2022	0020_MW059_220412	ES2213152	0.12	0.49	<0.01	0.61	0.71	0.68	-	-	0.03	<0.02	-	<0.02	-	0.03	-	<0.1	<0.02	<0.02
Pathway	0020_MW059	10 Oct 2022	0020_MW059_221010	ES2236866	0.18	0.60	<0.01	0.78	0.90	0.86	-	-	0.04	<0.02	-	<0.02	-	0.04	-	<0.1	<0.02	<0.02
Pathway	0020_MW059	30 Jan 2023	0020_MW059_230130	ES2303447	1.28	0.66	0.05	1.94	2.25	2.18	-	-	0.03	<0.02	-	0.04	-	0.03	-	<0.1	<0.02	<0.02
Pathway	0020_MW059	30 Jan 2023	0020_QC100_230130	ES2303447	1.07	0.58	0.04	1.65	1.92	1.85	-	-	0.02	<0.02	-	0.04	-	0.03	-	<0.1	<0.02	<0.02
Pathway	0020_MW059	21 Oct 2024	0020_MW059_241021	ES2435143	1.46	0.31	0.03	1.77	1.87	1.82	-	-	<0.02	<0.02	-	0.03	-	0.02	-	<0.1	<0.02	<0.02
Pathway	0020_MW059	31 Mar 2025	0020_MW059_250331	ES2510618	0.44	0.53	<0.01	0.97	1.01	0.99	-	-	0.02	<0.02	-	<0.02	-	0.02	-	<0.1	<0.02	<0.02
Pathway	0020_MW071	24 Apr 2025	0020_MW071_250424	ES2512752	<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
Pathway	0020_MW102D	10 Apr 2018	CL_MW02_180410	ES1810721	0.0280	0.0882	0.0034	0.116	0.154	0.143	-	-	0.0124	<0.0020[#4]	-	<0.0020[#4]	-	0.0104	-	<0.002	<0.0020[#4]	<0.0020[#4]
Pathway	0020_MW102D	10 Apr 2018	CL_QC211_180410	594255	<0.0001	<0.001	<0.001	<0.001	<0.005	<0.005	-	-	<0.001	<0.001	-	<0.001	-	<0.001	-	<0.005	<0.001	<0.001
Pathway	0020_MW102D	02 May 2018	CL_MW02_180502	ES1812871	0.05	0.10	<0.01	0.15	0.22	0.20	-	-	0.02	<0.02	-	<0.02	-	0.02	-	<0.1	<0.02	<0.02

				PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids									
				Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL				0.0001	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	0.01	0.002	0.0005	0.0005
PFAS NEMP 2025 Freshwater and Interim Marine 95%				0.13[#1]		220[#1]															
PFAS NEMP 2025 Recreational water quality				2[#2]	2[#2]	10[#2]	2[#2]														
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																	
Pathway	0020_MW102D	18 Oct 2021	0020_MW102_211018	ES2138638	0.09	0.21	<0.01	0.30	0.39	0.36	-	-	0.03	<0.02	-	<0.02	-	0.03	-	<0.1	<0.02	<0.02
Pathway	0020_MW102D	04 Apr 2022	0020_MW102_220404	ES2212597	0.14	0.30	<0.01	0.44	0.59	0.55	-	-	0.06	<0.02	-	<0.02	-	0.04	-	<0.1	<0.02	<0.02
Pathway	0020_MW102D	10 Oct 2022	0020_MW102_221010	ES2237104	0.16	0.17	<0.01	0.33	0.36	0.36	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0020_MW102D	10 Oct 2022	0020_QC201_221010	308190	0.15	0.18	<0.01	0.33	0.39	-	0.15	-	0.02	<0.02	-	<0.01	-	0.02	-	<0.02	<0.02	<0.05
Pathway	0020_MW102D	17 Apr 2023	0020_MW102D_230417	ES2313254	0.27	0.22	<0.01	0.49	0.59	0.56	-	-	0.03	<0.02	-	<0.02	-	0.03	-	<0.1	<0.02	<0.02
Pathway	0020_MW102D	16 Oct 2023	0020_MW102D_ 231016	ES2336397	0.11	0.14	<0.01	0.25	0.27	0.27	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0020_MW102D	16 Oct 2023	0020_QC100_ 231016	ES2336397	0.14	0.17	<0.01	0.31	0.33	0.33	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0020_MW102D	16 Oct 2023	0020_QC200_231016	335710	0.11	0.18	<0.01	0.29	0.37	-	0.11	-	0.02	<0.02	-	<0.01	-	0.03	-	<0.02	<0.02	<0.05
Pathway	0020_MW102D	08 Apr 2024	0020_MW102D_240408	ES2411964	1.16	0.43	0.02	1.59	1.93	1.85	-	-	0.02	<0.02	-	0.06	-	0.02	-	<0.1	<0.02	<0.02
Pathway	0020_MW102D	22 Oct 2024	0020_MW102D_241022	ES2435143	0.12	0.18	<0.01	0.30	0.34	0.32	-	-	0.02	<0.02	-	<0.02	-	0.02	-	<0.1	<0.02	<0.02
Pathway	0020_MW102D	22 Oct 2024	0020_QC253_241022	1154740	0.16	0.23	<0.01	0.39	0.48	0.44	0.16	0.39	0.03	<0.01	<0.01	<0.01	0.01	0.03	-	<0.05	<0.01	<0.01
Pathway	0020_MW102D	31 Mar 2025	0020_MW102D_250331	ES2510618	0.12	0.23	<0.01	0.35	0.39	0.37	-	-	0.02	<0.02	-	<0.02	-	0.02	-	<0.1	<0.02	<0.02
Pathway	0020_MW102S	22 Oct 2024	0020_MW102S_241022	ES2435143	0.09	0.16	<0.01	0.25	0.27	0.27	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0020_MW102S	31 Mar 2025	0020_MW102S_250331	ES2510618	0.04	0.05	<0.01	0.09	0.09	0.09	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0020_MW104	10 Apr 2018	CL_MW04_180410	ES1810721	<0.0003	0.0062	<0.0005	0.0062	0.0070	0.0062	-	-	<0.0005	<0.0005	-	<0.0005	-	0.0008	-	<0.002	<0.0005	<0.0005
Pathway	0020_MW104	22 Oct 2024	0020_MW104_241022	ES2435143	<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
Pathway	0020_MW104	22 Oct 2024	0020_QC153_241022	ES2435143	<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
Pathway	0020_MW104	03 Apr 2025	0020_MW104_250403	ES2510618	<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
Pathway	0020_MW104	03 Apr 2025	0020_QC138_250403	ES2510618	<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
Pathway	0020_MW104	03 Apr 2025	0020_QC238_250403	1209674	<0.01	<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	-	<0.05	<0.01	<0.01
Pathway	0020_MW105	10 Apr 2018	CL_MW05_180410	ES1810721	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	<0.0003	-	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	-	<0.002	<0.0005	<0.0005
Pathway	0020_MW105	15 Oct 2021	0020_MW105_211015	ES2138638	<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
Pathway	0020_MW105	04 Apr 2022	0020_MW105_220404	ES2212597	<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
Pathway	0020_MW105	10 Oct 2022	0020_MW105_221010	ES2237104	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
Pathway	0020_MW105	17 Apr 2023	0020_MW105_230417	ES2313254	<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
Pathway	0020_MW105	16 Oct 2023	0020_MW105_ 231016	ES2336397	<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
Pathway	0020_MW105	08 Apr 2024	0020_MW105_240408	ES2411964	<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
Pathway	0020_SW011	18 Apr 2017	CL_SW08	ES1709535	0.14	0.187	0.0033	0.327	0.379	0.359	-	-	0.0138	<0.0005	-	0.0034	-	0.0167	-	<0.002	<0.0005	<0.0005
Pathway	0020_SW011	18 Apr 2017	JCQA02	ES1709535	0.165	0.176	0.0031	0.341	0.39	0.37	-	-	0.013	<0.0005	-	0.0033	-	0.0163	-	<0.002	<0.0005	<0.0005
Pathway	0020_SW011	01 May 2018	CL_SW08_180501	ES1812871	0.263	0.405	0.0107	0.668	0.801	0.743	-	-	0.0399	0.0008	-	0.0139	-	0.0432	-	<0.002	<0.0005	<0.0005
Pathway	0020_SW011	21 Oct 2021	0020_SW011_211021	ES2138638	0.32	0.38	0.01	0.70	0.81	0.78	-	-	0.02	<0.02	-	<0.02	-	0.03	-	<0.1	<0.02	<0.02
Pathway	0020_SW011	04 Apr 2022	0020_SW011_220404	ES2212597	0.17	0.16	<0.01	0.33	0.35	0.35	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0020_SW011	07 Jul 2022	0020_SW011_220707	ES2224472	0.16	0.13	<0.01	0.29	0.29	0.29	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0020_SW011	10 Oct 2022	0020_SW011_221012	ES2236866	0.18	0.17	<0.01	0.35	0.38	0.38	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0020_SW011	12 Oct 2022	0020_SW011_221012	ES2237104	0.13	0.14	<0.01	0.27	0.29	0.29	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0020_SW011	01 Feb 2023	0020_SW011_230201	ES2303447	0.25	0.37	<0.01	0.62	0.67	0.64	-	-	0.02	<0.02	-	<0.02	-	0.03	-	<0.1	<0.02	<0.02
Pathway	0020_SW011	17 Apr 2023	0020_SW011_230417	ES2313254	0.21	0.23	<0.01	0.44	0.46	0.46	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0020_SW011	16 Oct 2023	0020_SW011_ 231016	ES2336397	0.08	0.09	<0.01	0.17	0.17	0.17	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0020_SW011	08 Apr 2024	0020_SW011_240408	ES2411964	0.26	0.16	<0.01	0.42	0.42	0.42	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0020_SW011	23 Oct 2024	0020_SW011_241023	ES2435143	0.10	0.08	<0.01	0.18	0.18	0.18	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0020_SW011	02 Apr 2025	0020_SW011_250402	ES2510618	0.10	0.14	<0.01	0.24	0.24	0.24	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0020_SW057	12 Apr 2022	0020_QC113_220412	ES2213152	0.53	0.19	0.01	0.72	0.75	0.75	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0020_SW057	12 Apr 2022	0020_SW057_220412	ES2213152	0.58	0.21	0.01	0.79	0.84	0.82	-	-	<0.02	<0.02	-	0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0020_SW057	07 Jul 2022	0020 SW057_220707	ES2224472	0.25	0.07	<0.01	0.32	0.32	0.32	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0020_SW057	10 Oct 2022	0020_SW057_221010	ES2236866	0.65	0.10	0.01	0.75	0.76	0.76	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0020_SW057	30 Jan 2023	0020_SW057_230130	ES2303447	0.82	0.15	0.02	0.97	1.05	1.05	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0020_SW057	21 Oct 2024	0020_SW057_241021	ES2435143	1.02	0.22	<0.01	1.24	1.24	1.24	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0020_SW057	31 Mar 2025	0020_QC100_250331	ES2510618	0.09	0.05	<0.01	0.14	0.14	0.14	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0020_SW057	31 Mar 2025	0020_QC200_250331	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	<0.01	-	<0.05	<0.01	<0.01
Pathway	0020_SW057	31 Mar 2025	0020_SW057_250331	ES2510618	0.08	0.04	<0.01	0.12	0.12	0.12	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0021_MW018	04 May 2017	MW018	ES1711220	0.0381	0.176	0.0031	0.214	0.298	0.264	-	-	0.0231	<0.0005	-	0.0057	-	0.0277	-	<0.002	<0.0005	<0.0005
Pathway	0021_MW018	22 Oct 2024	0021_MW018_241022	ES2435078	0.05	0.10	<0.01	0.15	0.15	0.15	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0021_MW018	02 Apr 2025	0021_MW018_250402	ES2510113	0.03	0.11	<0.01	0.14	0.14	0.14	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0021_MW108	08 May 2017	A_MW08	ES1711220	0.159	4.8	0.0539	4.96	7.02	6.59	-	-	0.358	<0.0005	-	0.0572	-	0.375	-	<0.002	<0.0005	<0.0005
Pathway	0021_MW108	19 Oct 2021	0021_MW108_211019	ES2138639	5.21	4.14	0.10	9.35	10.8	10.4	-	-	0.18	<0.02	-	0.17	-	0.26	-	<0.1	<0.02	<0.02
Pathway	0021_MW108	06 Apr 2022	0021_MW108_220406	ES2212442	4.20	3.49	0.14	7.69	9.39	9.00	-	-	0.20	<0.02	-	0.14	-	0.25	-	<0.1	<0.02	<0.02
Pathway	0021_MW108	13 Oct 2022	0021_MW108_221013	ES2237106	5.34	3.90	0.18	9.24	11.2	10.7	-	-	0.15	<0.02	-	0.16	-	0.27	-	0.1	<0.02	<0.02
Pathway	0021_MW108	20 Apr 2023	0021_MW108_230420	ES2313364	7.04	5.76	0.25	12.8	15.4	14.8	-	-	0.21	<0.02	-	0.24	-	0.36	-	0.1	<0.02	<0.02
Pathway	0021_MW108	18 Oct 2023	0021_MW108_231018	ES2336398	2.42	3.42	0.08	5.84	7.05	6.68	-	-	0.17	<0.02	-	0.11	-	0.26	-	<0.1	<0.02	<0.02
Pathway	0021_MW108	11 Apr 2024	0021_MW108_240411	ES2411994	5.87	4.01	0.15	9.88	11.4	10.9	-	-	0.18	<0.02	-	0.16	-	0.28	-	<0.1	<0.02	<0.02
Pathway	0021_MW108	28 Oct 2024	0021_MW108_241028	ES2435541	1.68	2.67	0.06	4.35	5.54	5.19	-	-	0.15	<0.02	-	0.06	-	0.26	-	<0.1	<0.02	<0.02

				PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids									
				Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL				0.0001	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	0.01	0.002	0.0005	0.0005
PFAS NEMP 2025 Freshwater and Interim Marine 95%				0.13[#1]		220[#1]															
PFAS NEMP 2025 Recreational water quality				2[#2]	2[#2]	10[#2]	2[#2]														
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																	
Pathway	0021_MW108	04 Apr 2025	0021_MW108_250404	ES2510113	3.18	2.29	0.07	5.47	6.23	5.97	-	-	0.08	<0.02	-	0.11	-	0.13	-	<0.1	<0.02	<0.02
Pathway	0021_MW124	04 May 2017	CL_MW01	ES1711220	0.644	0.327	0.0152	0.971	1.12	1.06	-	-	0.0283	<0.0005	-	0.0211	-	0.0388	-	<0.002	0.0006	<0.0005
Pathway	0021_MW124	03 May 2018	CL_MW01_180503	ES1812871	0.09	0.09	<0.01	0.18	0.18	0.18	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0021_MW124	03 May 2018	CL_QC114_180503	ES1812871	0.43	0.25	<0.01	0.68	0.74	0.71	-	-	<0.02	<0.02	-	<0.02	-	0.03	-	<0.1	<0.02	<0.02
Pathway	0021_MW124	20 Oct 2021	0021_MW124_211020	ES2138639	0.44	0.28	<0.01	0.72	0.76	0.74	-	-	<0.02	<0.02	-	<0.02	-	0.02	-	<0.1	<0.02	<0.02
Pathway	0021_MW124	06 Apr 2022	0021_MW124_220406	ES2212442	0.51	0.33	0.01	0.84	0.96	0.93	-	-	0.03	<0.02	-	<0.02	-	0.03	-	<0.1	<0.02	<0.02
Pathway	0021_MW124	11 Oct 2022	0021_MW124_221011	ES2237106	0.50	0.23	0.01	0.73	0.78	0.78	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0021_MW124	01 Feb 2023	0021_MW124_230201	ES2303446	0.50	0.28	0.01	0.78	0.84	0.84	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0021_MW124	17 Apr 2023	0021_MW124_230417	ES2313364	0.58	0.31	0.01	0.89	0.97	0.95	-	-	<0.02	<0.02	-	<0.02	-	0.02	-	<0.1	<0.02	<0.02
Pathway	0021_MW124	16 Oct 2023	0021_MW124_231016	ES2336398	0.31	0.20	<0.01	0.51	0.54	0.54	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0021_MW124	10 Apr 2024	0021_MW124_240410	ES2411994	0.31	0.22	<0.01	0.53	0.53	0.53	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0021_MW124	22 Oct 2024	0021_MW124_241022	ES2435078	0.24	0.16	<0.01	0.40	0.40	0.40	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0021_MW124	02 Apr 2025	0021_MW125_250402	ES2510113	0.05	0.09	<0.01	0.14	0.14	0.14	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0021_MW124	03 Apr 2025	0021_MW124_250403	ES2510113	0.44	0.22	<0.01	0.66	0.66	0.66	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0021_MW134	04 May 2017	TC_MW01	ES1711220	0.0004	<0.0005	<0.0005	0.0004	0.0004	0.0004	-	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	-	<0.002	<0.0005	<0.0005
Pathway	0021_MW134	11 Apr 2022	0021_MW134_220411	ES2213156	<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
Pathway	0021_MW134	11 Apr 2022	0021_QC200_220411	880531	<0.01	<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	<0.05	<0.01	<0.01
Pathway	0021_MW134	11 Oct 2022	0021_MW134_221011	ES2236834	<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
Pathway	0021_MW134	01 Feb 2023	0021_MW134_230201	ES2303446	<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
Pathway	0021_MW134	24 Oct 2024	0021_MW134_241024	ES2435541	<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
Pathway	0021_MW134	08 Apr 2025	0021_MW134_250408	ES2510113	<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
Pathway	0021_SW013	18 Apr 2017	CL_SW09	ES1709535	0.708	0.736	0.0102	1.44	1.58	1.52	-	-	0.0345	<0.0005	-	0.0116	-	0.044	-	<0.002	<0.0005	<0.0005
Pathway	0021_SW013	30 Apr 2018	CL_SW09_180430	ES1812871	0.596	0.655	0.0189	1.25	1.48	1.39	-	-	0.0581	0.0007	-	0.0234	-	0.0631	-	<0.002	<0.0005	<0.0005
Pathway	0021_SW013	20 Oct 2021	0021_SW013_211020	ES2138639	0.70	0.47	0.02	1.17	1.36	1.32	-	-	0.03	<0.02	-	<0.02	-	0.04	-	<0.1	<0.02	<0.02
Pathway	0021_SW013	06 Apr 2022	0021_SW013_220406	ES2212442	0.19	0.20	<0.01	0.39	0.44	0.44	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0021_SW013	10 Oct 2022	0021_SW013_221010	ES2237106	0.31	0.31	0.01	0.62	0.70	0.68	-	-	<0.02	<0.02	-	<0.02	-	0.02	-	<0.1	<0.02	<0.02
Pathway	0021_SW013	17 Apr 2023	0021_SW013_230417	ES2313364	0.46	0.47	0.02	0.93	1.06	1.02	-	-	0.02	<0.02	-	<0.02	-	0.04	-	<0.1	<0.02	<0.02
Pathway	0021_SW013	16 Oct 2023	0021_SW013_231016	ES2336399	0.49	0.23	0.01	0.72	0.76	0.76	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0021_SW013	10 Apr 2024	0021_QC106_240410	ES2412012	0.13	0.18	<0.01	0.31	0.31	0.31	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0021_SW013	10 Apr 2024	0021_QC206_240410	348825	0.13	0.16	<0.01	0.29	0.30	-	0.13	-	0.01	<0.02	-	<0.01	-	<0.01	-	<0.02	<0.02	<0.05
Pathway	0021_SW013	10 Apr 2024	0021_SW013_240410	ES2412012	0.13	0.18	<0.01	0.31	0.31	0.31	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0021_SW013	22 Oct 2024	0021_SW013_241022	ES2435078	0.31	0.20	<0.01	0.51	0.54	0.54	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0021_SW013	01 Apr 2025	0021_SW013_250401	ES2510622	0.21	0.24	<0.01	0.45	0.45	0.45	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0021_SW019	20 Apr 2017	DC_SW04	ES1709644	4.27	5.23	0.0996	9.50	11.4	11.1	-	-	0.460	0.0023	-	0.156	-	0.129	-	<0.002	0.0016	<0.0005
Pathway	0021_SW019	19 Oct 2021	0021_SW019_211019	ES2138639	0.53	0.37	0.01	0.90	1.09	1.05	-	-	0.04	<0.02	-	<0.02	-	0.04	-	<0.1	<0.02	<0.02
Pathway	0021_SW019	05 Apr 2022	0021_QC203_220405	293031	5.4	2.8	0.15	8.2	10	-	5.6	-	0.25	<0.02	-	0.16	-	0.25	-	0.08	<0.02	<0.05
Pathway	0021_SW019	05 Apr 2022	0021_SW019_220405	ES2212442	4.57	2.60	0.12	7.17	8.96	8.57	-	-	0.25	<0.02	-	0.16	-	0.23	-	<0.1	<0.02	<0.02
Pathway	0021_SW019	07 Jul 2022	0021_SW019_220707	ES2224473	4.19	2.12	0.11	6.31	7.35	7.03	-	-	0.13	<0.02	-	0.14	-	0.18	-	<0.1	<0.02	<0.02
Pathway	0021_SW019	13 Oct 2022	0021_SW019_221013	ES2237106	2.55	2.03	0.11	4.58	5.70	5.42	-	-	0.13	<0.02	-	0.10	-	0.18	-	<0.1	<0.02	<0.02
Pathway	0021_SW019	01 Feb 2023	0021_SW019_230201	ES2303446	1.25	2.51	0.10	3.76	5.53	5.18	-	-	0.25	<0.02	-	0.07	-	0.28	-	0.1	<0.02	<0.02
Pathway	0021_SW019	20 Apr 2023	0021_SW019_230420	ES2313364	1.92	2.58	0.10	4.50	5.96	5.57	-	-	0.24	<0.02	-	0.09	-	0.30	-	<0.1	<0.02	<0.02
Pathway	0021_SW019	11 Apr 2024	0021_SW019_240411	ES2412012	1.38	1.78	0.06	3.16	4.11	3.82	-	-	0.15	<0.02	-	0.05	-	0.19	-	<0.1	<0.02	<0.02
Pathway	0021_SW019	03 Apr 2025	0021_SW019_250403	ES2510622	1.29	1.66	0.07	2.95	3.87	3.61	-	-	0.13	<0.02	-	0.05	-	0.15	-	<0.1	<0.02	<0.02
Pathway	0021_SW021	13 Apr 2017	DC_SW06	ES1709064	0.747	0.762	0.0937	1.51	2.33	2.03	-	-	0.128	0.0038	-	0.0955	-	0.191	-	<0.002	0.0039	<0.0005
Pathway	0021_SW021	20 Oct 2021	0021_SW021_211020	ES2138639	1.02	1.66	0.07	2.68	3.54	3.29	-	-	0.14	<0.02	-	0.06	-	0.19	-	<0.1	<0.02	<0.02
Pathway	0021_SW021	06 Apr 2022	0021_SW021_220406	ES2212442	0.15	0.05	<0.01	0.20	0.20	0.20	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Pathway	0021_SW021	07 Jul 2022	0021_SW021_220707	ES2224473	0.65	0.45	0.02	1.10	1.30	1.23	-	-	0.03	<0.02	-	0.03	-	0.04	-	<0.1	<0.02	<0.02
Pathway	0021_SW021	14 Oct 2022	0021_SW021_221014	ES2237106	0.79	0.64	0.03	1.43	1.74	1.67	-	-	0.03	<0.02	-	0.03	-	0.04	-	<0.1	<0.02	<0.02
Pathway	0021_SW021	12 Apr 2024	0021_SW021_240412	ES2412012	0.61	1.02	0.03	1.63	2.08	1.93	-	-	0.08	<0.02	-	0.02	-	0.10	-	<0.1	<0.02	<0.02
Pathway	0021_SW021	02 Apr 2025	0021_QC106_250402	ES2510113	0.20	0.27	0.02	0.47	0.55	0.53	-	-	<0.02	<0.02	-	<0.02	-	0.02	-	<0.1	<0.02	<0.02
Pathway	0021_SW021	02 Apr 2025	0021_QC206_250402	1210052	0.17	0.33	<0.01	0.5	0.63	0.6	0.17	0.5	0.03	<0.01	<0.01	<0.01	<0.01	0.03	-	<0.05	<0.01	<0.01
Pathway	0021_SW021	02 Apr 2025	0021_SW021_250402	ES2510622	0.17	0.34	<0.01	0.51	0.61	0.58	-	-	0.02	<0.02	-	<0.02	-	0.03	-	<0.1	<0.02	<0.02
Pathway	0021_SW126	20 Aug 2020	0021_SW126_200820	EW2003840	3.70	3.06	0.213	6.76	10.2	9.41	-	-	0.295	0.0083	-	0.257	-	0.532	-	0.133	0.0058	<0.0005
Pathway	0021_SW126	19 Oct 2021	0021_SW126_211019	ES2138639	1.37	1.67	0.07	3.04	4.38	4.14	-	-	0.17	<0.02	-	0.06	-	0.18	-	<0.1	<0.02	<0.02
Pathway	0021_SW126	05 Apr 2022	0021_SW126_220405	ES2212442	0.61	1.35	0.05	1.96	3.16	2.96	-	-	0.13	<0.02	-	0.05	-	0.15	-	<0.1	<0.02	<0.02
Pathway	0021_SW126	13 Oct 2022	0021_SW126_221013	ES2237106	0.64	0.97	0.05	1.61	2.28	2.16	-	-	0.07	<0.02	-	0.03	-	0.09	-	<0.1	<0.02	<0.02
Pathway	0021_SW126	20 Apr 2023	0021_SW126_230420	ES2313364	0.76	1.29	0.05	2.05	2.77	2.59	-	-	0.08	<0.02	-	0.03	-	0.15	-	<0.1	<0.02	<0.02
Pathway	0021_SW126	18 Oct 2023	0021_SW126_231018	ES2336399	1.45	1.24	0.05	2.69	3.26	3.10	-	-	0.08	<0.02	-	0.04	-	0.12	-	<0.1	<0.02	<0.02
Pathway	0021_SW126	11 Apr 2024	0021_QC114_240411	ES2412012	0.17	1.33	0.03	1.50	3.18	2.79	-	-	0.29	<0.02	-	<0.02	-	0.29	-	<0.1	<0.02	<0.02
Pathway	0021_SW126	11 Apr 2024	0021_QC214_240411	348825	0.20	1.1	0.03	1.3	2.8	-	0.23	-	0.26	<0.02	-	<0.01	-	0.25	-	0.07	<0.02	<0.05
Pathway	0021_SW126	11 Apr 2024	0021_SW126_240411	ES2412012	0.23	1.36	0.03	1.59	3.27	2.87	-	-	0.28	<0.02	-	<0.02	-	0.30	-	<0.1	<0.02	<0.02

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids									
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL					0.0001	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	0.01	0.002	0.0005	0.0005
PFAS NEMP 2025 Freshwater and Interim Marine 95%					0.13[#1]		220[#1]															
PFAS NEMP 2025 Recreational water quality					2[#2]	2[#2]	10[#2]	2[#2]														
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																		
Pathway	0021_SW126	03 Apr 2025	0021_SW126_250403	ES2510623	2.48	3.18	0.17	5.66	7.89	7.35	-	-	0.26	<0.02	-	0.12	-	0.33	-	0.1	<0.02	<0.02
Receptor	0020_SW004	18 Apr 2017	CL_SW01	ES1709535	0.768	0.184	0.0031	0.952	0.98	0.967	-	-	0.0067	<0.0005	-	0.0025	-	0.01	-	<0.002	<0.0005	<0.0005
Receptor	0020_SW004	01 May 2018	CL_SW01_180501	ES1812871	0.269	0.292	0.0119	0.561	0.716	0.677	-	-	0.0238	<0.0005	-	0.0107	-	0.0279	-	<0.002	<0.0005	<0.0005
Receptor	0020_SW004	18 Oct 2021	0020_SW004_211018	ES2138638	0.13	0.18	<0.01	0.31	0.33	0.33	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Receptor	0020_SW004	04 Apr 2022	0020_SW004_220404	ES2212597	0.23	0.21	<0.01	0.44	0.44	0.44	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Receptor	0020_SW004	07 Jul 2022	0020_SW004_220101	ES2224472	0.24	0.08	<0.01	0.32	0.32	0.32	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Receptor	0020_SW004	11 Oct 2022	0020_SW004_221011	ES2237104	0.02	<0.01	<0.01	0.02	0.02	0.02	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Receptor	0020_SW004	30 Jan 2023	0020_SW004_230130	ES2303447	0.89	0.12	<0.01	1.01	1.03	1.03	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Receptor	0020_SW004	17 Apr 2023	0020_SW004_230417	ES2313254	0.15	0.11	<0.01	0.26	0.26	0.26	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Receptor	0020_SW004	16 Oct 2023	0020_SW004_ 231016	ES2336397	0.27	0.10	<0.01	0.37	0.37	0.37	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Receptor	0020_SW004	08 Apr 2024	0020_SW004_240408	ES2411964	0.25	0.12	<0.01	0.37	0.37	0.37	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Receptor	0020_SW004	25 Oct 2024	0020_SW004_241025	ES2435539	0.22	0.10	<0.01	0.32	0.32	0.32	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Receptor	0020_SW004	31 Mar 2025	0020_SW004_250331	ES2510618	0.02	0.02	<0.01	0.04	0.04	0.04	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Receptor	0020_SW005	18 Apr 2017	CL_SW02	ES1709535	1.64	0.289	0.0047	1.93	1.98	1.96	-	-	0.0135	<0.0005	-	0.003	-	0.0172	-	<0.002	0.0009	<0.0005
Receptor	0020_SW005	01 May 2018	CL_SW02_180501	ES1812871	0.300	0.340	0.0133	0.640	0.802	0.762	-	-	0.0241	<0.0005	-	0.0115	-	0.0281	-	<0.002	<0.0005	<0.0005
Receptor	0020_SW005	18 Oct 2021	0020_SW005_211018	ES2138638	0.20	0.19	<0.01	0.39	0.44	0.44	-	-	0.03	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Receptor	0020_SW005	04 Apr 2022	0020_SW005_220404	ES2212597	0.62	0.33	0.01	0.95	1.00	1.00	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Receptor	0020_SW005	11 Oct 2022	0020_SW005_221011	ES2237104	0.81	0.17	0.02	0.98	1.05	1.05	-	-	0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Receptor	0020_SW005	17 Apr 2023	0020_SW005_230417	ES2313254	2.07	0.87	0.06	2.94	3.50	3.41	-	-	0.03	<0.02	-	0.05	-	0.04	-	0.2	<0.02	<0.02
Receptor	0020_SW005	16 Oct 2023	0020_SW005_ 231016	ES2336397	0.26	0.12	<0.01	0.38	0.40	0.40	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Receptor	0020_SW005	08 Apr 2024	0020_SW005_240408	ES2411964	0.33	0.06	<0.01	0.39	0.39	0.39	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Receptor	0020_SW005	25 Oct 2024	0020_SW005_241025	ES2435539	0.18	0.09	<0.01	0.27	0.27	0.27	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Receptor	0020_SW005	31 Mar 2025	0020_SW005_250331	ES2510618	0.03	0.02	<0.01	0.05	0.05	0.05	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Receptor	0020_SW010	18 Apr 2017	CL_SW07	ES1709535	0.15	0.173	0.0027	0.323	0.366	0.349	-	-	0.0122	<0.0005	-	0.0025	-	0.0153	-	<0.002	<0.0005	<0.0005
Receptor	0020_SW010	01 May 2018	CL_QC221_180501	597346	0.28[#3]	0.30[#3]	0.01[#3]	0.58	0.71	0.69	-	-	0.03[#3]	<0.01	-	<0.01[#3]	-	0.02[#3]	-	<0.05	<0.01	<0.01
Receptor	0020_SW010	01 May 2018	CL_SW07_180501	ES1812871	0.218	0.269	0.0142	0.487	0.651	0.611	-	-	0.0261	<0.0005	-	0.0116	-	0.0276	-	<0.002	<0.0005	<0.0005
Receptor	0020_SW010	18 Oct 2021	0020_SW010_211018	ES2138638	0.17	0.21	<0.01	0.38	0.41	0.41	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Receptor	0020_SW010	04 Apr 2022	0020_SW010_220404	ES2212597	0.21	0.10	<0.01	0.31	0.31	0.31	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Receptor	0020_SW010	07 Jul 2022	0020_SW010_220101	ES2224472	0.16	0.09	<0.01	0.25	0.25	0.25	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Receptor	0020_SW010	10 Oct 2022	0020_SW010_221012	ES2236866	0.22	0.08	<0.01	0.30	0.30	0.30	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Receptor	0020_SW010	12 Oct 2022	0020_SW010_221012	ES2237104	0.14	0.06	<0.01	0.20	0.23	0.23	-	-	0.03	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Receptor	0020_SW010	30 Jan 2023	0020_QC120_230130	ES2303447	0.14	0.11	<0.01	0.25	0.27	0.27	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Receptor	0020_SW010	30 Jan 2023	0020_SW010_230130	ES2303447	0.16	0.12	<0.01	0.28	0.30	0.30	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Receptor	0020_SW010	17 Apr 2023	0020_SW010_230417	ES2313254	0.07	0.07	<0.01	0.14	0.14	0.14	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Receptor	0020_SW010	16 Oct 2023	0020_SW010_ 231016	ES2336397	1.16	0.12	<0.01	1.28	1.28	1.28	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Receptor	0020_SW010	08 Apr 2024	0020_SW010_240408	ES2411964	0.16	0.12	<0.01	0.28	0.30	0.30	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Receptor	0020_SW010	25 Oct 2024	0020_QC110_241025	ES2435539	0.18	0.08	<0.01	0.26	0.26	0.26	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Receptor	0020_SW010	25 Oct 2024	0020_QC210_241025	1156671	0.32	0.08	<0.01	0.4	0.41	0.41	0.32	0.4	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.05	<0.01	<0.01
Receptor	0020_SW010	25 Oct 2024	0020_SW010_241025	ES2435539	0.25	0.08	<0.01	0.33	0.33	0.33	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Receptor	0020_SW010	31 Mar 2025	0020_SW010_250331	ES2510618	0.10	0.06	<0.01	0.16	0.16	0.16	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Receptor	0020_SW012	26 Mar 2018	CL_QC206_180326	592055	0.0003[#3]	<0.001	<0.001	<0.001	<0.005	<0.005	-	-	<0.001	<0.001	-	<0.001	-	<0.001	-	<0.005	<0.001	<0.001
Receptor	0020_SW012	26 Mar 2018	CL_SW12_180326	ES1809241	0.0020	0.0013	<0.0005	0.0033	0.0033	0.0033	-	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	-	<0.002	<0.0005	<0.0005
Receptor	0020_SW012	15 May 2018	CL_SW12_180515	ES1814324	0.0007	0.0009	<0.0005	0.0016	0.0016	0.0016	-	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	-	<0.002	<0.0005	<0.0005
Receptor	0020_SW012	18 Oct 2021	0020_SW012_211018	ES2138638	<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
Receptor	0020_SW012	04 Apr 2022	0020_SW012_220404	ES2212597	<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
Receptor	0020_SW012	11 Oct 2022	0020_SW012_221011	ES2237104	<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
Receptor	0020_SW012	17 Apr 2023	0020_SW012_230417	ES2313254	<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
Receptor	0020_SW012	16 Oct 2023	0020_SW012_ 231016	ES2336397	<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
Receptor	0020_SW012	08 Apr 2024	0020_QC104_240408	ES2411964	0.14	0.13	<0.01	0.27	0.27	0.27	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Receptor	0020_SW012	08 Apr 2024	0020_QC204_240408	348827	0.27	0.14	<0.01	0.41	0.44	-	0.27	-	0.01	<0.02	-	<0.01	-	<0.01	-	<0.02	<0.02	<0.05
Receptor	0020_SW012	08 Apr 2024	0020_SW012_240408	ES2411964	0.26	0.11	<0.01	0.37	0.37	0.37	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02
Receptor	0020_SW012	25 Oct 2024	0020_SW012_241025	ES2435539	<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
Receptor	0020_SW012	31 Mar 2025	0020_SW012_250331	ES2510618	0.03	0.02	<0.01	0.05	0.05	0.05	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids									
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL	0.0001	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	0.01	0.002	0.0005	0.0005
PFAS NEMP 2025 Freshwater and Interim Marine 95%	0.13[#1]		220[#1]															
PFAS NEMP 2025 Recreational water quality	2[#2]	2[#2]	10[#2]	2[#2]														
Statistics																		
Number of Results	358	358	358	358	358	344	31	17	358	358	14	358	19	358	5	358	358	358
Number of Detects	314	312	183	317	317	304	27	14	185	19	4	141	4	194	3	32	14	0
Minimum Concentration	<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	<0.01	<0.002	<0.0005	<0.0005
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	0.0008	0.02	0.03	0.0006	ND
Maximum Concentration	456	37.4	3.26	492	517	511	9.15	12.95	1.9	0.12	0.66	3.46	0.31	2.7	0.04	0.8	0.05	<0.05
Maximum Detect	456	37.4	3.26	492	517	511	9.15	12.95	1.9	0.12	0.66	3.46	0.31	2.7	0.04	0.8	0.05	ND
Average Concentration *	4.5	1.2	0.075	5.7	6.4	6.3	2.3	3	0.079	0.011	0.058	0.083	0.024	0.1	0.02	0.055	0.0092	0.0093
Geometric Average *	0.25	0.21	0.014	0.46	0.54	0.51	0.34	0.53	0.024	0.0073	0.011	0.019	0.008	0.028	0.014	0.035	0.007	0.0068
Median Concentration *	0.25	0.24	0.005	0.5455	0.685	0.655	0.27	0.5	0.01	0.01	0.005	0.01	0.005	0.02	0.02	0.05	0.01	0.01
Standard Deviation *	34	3.4	0.28	37	39	39	3.2	4.1	0.2	0.013	0.17	0.3	0.07	0.27	0.015	0.07	0.0047	0.0044
Geometric Standard Deviation *	12	9.1	5.1	12	12	12	12	14	4.4	3	4	4.6	2.9	4.9	2.7	3.5	2.9	3.1
95% UCL (Student's-t) *	7.408	1.487	0.0993	8.859	9.784	9.774	3.228	4.697	0.0959	0.0119	0.14	0.109	0.0519	0.128	0.0347	0.0613	0.00957	0.00969
Number of Env Standard Exceedances	250	53	0	99	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Env Standard Exceedances (Detects Only)	250	53	0	99	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Detects	88	87	51	89	89	88	87	82	52	5	29	39	21	54	60	9	4	0
% of Non-Detects	12	13	49	11	11	12	13	18	48	95	71	61	79	46	40	91	96	100
% of Detects at or above Env Standards	70	15	0	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Results Below Env Standards or Non-Detect	30	85	100	72	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 Refer to Table 8 in PFAS NEMP 2025 for comments and notes
#2 Refer to Table 4 in PFAS NEMP 3.0 (2025) for comments and notes
#3 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.
#4 Reported Analyte LOR is higher than Requested Analyte LOR

Environmental Standards

HEPA, March 2025, PFAS NEMP 2025 Freshwater and Interim Marine 95%
HEPA, March 2025, PFAS NEMP 2025 Recreational water quality

				PFAS - Perfluoroalkyl Carboxylic Acids								PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
				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)	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 (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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	µg/L	µg/L
EQL				0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.05	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 2025 Freshwater and Interim Marine 95%																						
PFAS NEMP 2025 Recreational water quality																						
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																		
Source	0020_MW052	21 Dec 2021	0020_MW052_211221	ES2147062	<0.02	<0.02	<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
Source	0020_MW052	31 Mar 2025	0020_MW052_250331	ES2510618	<0.02	<0.02	<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
Source	0021_MW028	03 May 2017	MW028	ES1710866	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Source	0021_MW028	20 Oct 2021	0021_MW028_211020	ES2138639	<0.02	0.06	<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
Source	0021_MW028	20 Oct 2021	0021_QC103_211020	ES2138639	<0.02	0.06	<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
Source	0021_MW028	06 Apr 2022	0021_MW028_220406	ES2212442	<0.02	0.04	<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
Source	0021_MW028	06 Apr 2022	0021_QC204_220406	293031	<0.01	0.13	<0.01	0.03	<0.5	<0.1	<0.02	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
Source	0021_MW028	14 Oct 2022	0021_MW028_221014	ES2237106	<0.02	0.15	<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	<0.05
Source	0021_MW028	21 Apr 2023	0021_MW028_230421	ES2313364	0.04	0.29	<0.02	0.05	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW028	19 Oct 2023	0021_MW028_231019	ES2336398	<0.02	0.12	<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
Source	0021_MW028	12 Apr 2024	0021_MW028_240412	ES2411994	<0.02	0.09	<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
Source	0021_MW028	22 Oct 2024	0021_MW028_241022	ES2435078	<0.02	0.14	<0.02	0.06	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW028	22 Oct 2024	0021_QC103_241022	ES2435078	<0.02	0.14	<0.02	0.05	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW028	22 Oct 2024	0021_QC203_241022	1154751	<0.01	0.11	<0.01	0.05	<0.01	<0.01	<0.01	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.05	<0.01
Source	0021_MW028	02 Apr 2025	0021_MW028_250402	ES2510113	0.04	0.63	<0.02	0.19	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW030	03 May 2017	MW030	ES1710866	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Source	0021_MW030	21 Oct 2021	0021_MW030_211021	ES2138639	<0.02	<0.02	<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
Source	0021_MW030	06 Apr 2022	0021_MW030_220406	ES2212442	<0.02	<0.02	<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
Source	0021_MW030	14 Oct 2022	0021_MW030_221014	ES2237106	<0.02	<0.02	<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
Source	0021_MW030	19 Apr 2023	0021_MW030_230419	ES2313364	<0.02	<0.02	<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
Source	0021_MW030	18 Oct 2023	0021_MW030_231018	ES2336398	<0.02	<0.02	<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
Source	0021_MW030	10 Apr 2024	0021_MW030_240410	ES2411994	<0.02	<0.02	<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
Source	0021_MW030	24 Oct 2024	0021_MW030_241024	ES2435541	<0.02	<0.02	<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
Source	0021_MW030	03 Apr 2025	0021_MW030_250403	ES2510113	<0.02	<0.02	<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
Source	0021_MW030	03 Apr 2025	0021_QC255_250403	1210052	<0.01	<0.01	<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	<0.01	<0.05	<0.01
Source	0021_MW062	21 Jun 2021	0021_MW062_210621	ES2123994	2.08	9.48	0.04	1.44	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	0.16	<0.05
Source	0021_MW062	21 Jun 2021	0021_QC113_210621	ES2123994	2.20	10.7	0.04	1.42	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	0.18	<0.05
Source	0021_MW062	11 Apr 2024	0021_MW062_240411	ES2411994	0.90	4.62	0.07	0.63	<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
Source	0021_MW062	24 Oct 2024	0021_MW062_241024	ES2435541	0.70	4.64	0.06	0.69	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW062	25 Oct 2024	0021_QC157_241025	ES2435541	0.70	3.81	0.05	0.61	<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
Source	0021_MW062	29 Jan 2025	0021_MW062_250129	ES2503552	0.80	4.47	0.07	0.80	<0.05	<0.02	<0.02	<0.05	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	0.08	<0.05
Source	0021_MW062	24 Apr 2025	0021_MW062_250424	ES2512435	<0.02	<0.02	<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
Source	0021_MW102	01 May 2017	A_MW02	ES1710866	0.153	1.17	<0.0005	0.234	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	0.003	<0.001
Source	0021_MW102	19 Oct 2021	0021_MW102_211019	ES2138639	0.12	1.13	<0.02	0.18	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW102	19 Oct 2021	0021_QC201_211019	281322	0.15	1.0	<0.01	0.2	<0.5	<0.1	<0.02	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
Source	0021_MW102	05 Apr 2022	0021_MW102_220405	ES2212442	0.13	1.34	<0.02	0.16	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW102	13 Oct 2022	0021_MW102_221013	ES2237106	0.06	0.54	<0.02	0.10	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW102	20 Apr 2023	0021_MW102_230420	ES2313364	0.23	1.56	<0.02	0.32	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW102	20 Apr 2023	0021_QC109_230420	ES2313364	0.18	0.51	<0.02	0.20	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW102	20 Apr 2023	0021_QC209_230420	321517	0.13	1.2	0.01	0.25	<0.5	<0.1	<0.02	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
Source	0021_MW102	19 Oct 2023	0021_MW102_231019	ES2336398	0.13	1.16	<0.02	0.19	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW102	10 Apr 2024	0021_MW102_240410	ES2411994	0.14	0.91	<0.02	0.16	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW102	24 Oct 2024	0021_MW102_241024	ES2435541	0.17	1.32	<0.02	0.23	<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
Source	0021_MW102	04 Apr 2025	0021_MW102_250404	ES2510113	0.14	0.98	<0.02	0.16	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW109	08 May 2017	A_MW09	ES1711220	0.0013	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Source	0021_MW109	19 Oct 2021	0021_MW109_211019	ES2138639	0.04	0.39	<0.02	0.06	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW109	06 Apr 2022	0021_MW109_220406	ES2212442	0.02	0.26	<0.02	0.03	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW109	13 Oct 2022	0021_MW109_221013	ES2237106	<0.02	0.12	<0.02	0.03	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW109	13 Oct 2022	0021_QC209_221013	308187	0.02	0.11	<0.01	0.02	<0.5	<0.1	<0.02	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
Source	0021_MW109	20 Apr 2023	0021_MW109_230420	ES2313364	0.02	0.25	<0.02	0.06	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW109	18 Oct 2023	0021_MW109_231018	ES2336398	0.02	0.22	<0.02	0.03	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW109	10 Apr 2024	0021_MW109_240410	ES2411994	<0.02	0.19	<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	<0.05
Source	0021_MW109	24 Oct 2024	0021_MW109_241024	ES2435541	<0.02	0.11	<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
Source	0021_MW109	24 Oct 2024	0021_QC256_241024	1156146	0.02	0.11	<0.01	0.02	<0.01	<0.01	<0.01	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.05	<0.01
Source	0021_MW109	31 Jan 2025	0021_MW109_250131	ES2503552	<0.02	0.10	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW109	03 Apr 2025	0021_MW109_250403	ES2510113	0.02	0.26	<0.02	0.05	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW119	03 May 2017	C_MW03	ES1710866	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Source	0021_MW119	20 Oct 2021	0021_MW119_211020	ES2138639	<0.02	<0.02	<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
Source	0021_MW119	20 Oct 2021	0021_QC202_211020	281322	<0.01	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
Source	0021_MW119	06 Apr 2022	0021_MW119_220406	ES2212442	<0.02	<0.02	<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
Source	0021_MW119	11 Oct 2022	0021_MW119_221011	ES2237106	<0.02	<0.02	<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

					PFAS - Perfluoroalkyl Carboxylic Acids								PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					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)	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 (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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	µg/L	µg/L
EQL					0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.05	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 2025 Freshwater and Interim Marine 95%																							
PFAS NEMP 2025 Recreational water quality																							
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																			
Source	0021_MW119	03 Feb 2023	0021_MW119_230203	ES2303695	<0.02	<0.02	<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
Source	0021_MW119	21 Apr 2023	0021_MW119_230421	ES2313364	<0.02	<0.02	<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
Source	0021_MW119	19 Oct 2023	0021_MW119_231019	ES2336398	<0.02	<0.02	<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
Source	0021_MW119	12 Apr 2024	0021_MW119_240412	ES2411994	<0.02	<0.02	<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
Source	0021_MW119	22 Oct 2024	0021_MW119_241022	ES2435078	<0.02	<0.02	<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
Source	0021_MW119	02 Apr 2025	0021_MW119_250402	ES2510113	<0.02	<0.02	<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
Source	0021_MW120	03 May 2017	C_MW04	ES1710866	0.0032	0.0402	<0.0005	0.0075	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Source	0021_MW120	20 Oct 2021	0021_MW120_211020	ES2138639	<0.02	0.10	<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
Source	0021_MW120	20 Oct 2021	0021_QC102_211020	ES2138639	<0.02	0.10	<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
Source	0021_MW120	14 Oct 2022	0021_MW120_221014	ES2237106	<0.02	0.03	<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
Source	0021_MW120	21 Apr 2023	0021_MW120_230421	ES2313364	0.04	0.41	<0.02	0.06	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW120	19 Oct 2023	0021_MW120_231019	ES2336398	0.04	0.34	<0.02	0.07	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW120	12 Apr 2024	0021_MW120_240412	ES2411994	<0.02	0.18	<0.02	0.05	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW120	22 Oct 2024	0021_MW120_241022	ES2435078	0.02	0.20	<0.02	0.05	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW120	02 Apr 2025	0021_MW120_250402	ES2510113	0.02	0.20	<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	<0.05
Source	0021_MW121	03 May 2017	C_MW05	ES1710866	0.0006	0.0060	<0.0005	0.0020	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Source	0021_MW121	22 Oct 2021	0021_MW121_211022	ES2138639	<0.02	<0.02	<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
Source	0021_MW121	14 Oct 2022	0021_MW121_221014	ES2237106	<0.02	0.03	<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
Source	0021_MW121	01 Feb 2023	0021_MW121_230201	ES2303446	<0.02	0.04	<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
Source	0021_MW121	01 Feb 2023	0021_QC202_230201	961655	<0.01	0.04	<0.01	0.01[#3]	<0.01	<0.01	<0.01	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.05	<0.01
Source	0021_MW121	20 Apr 2023	0021_MW121_230420	ES2313364	<0.02	<0.02	<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
Source	0021_MW121	18 Oct 2023	0021_MW121_231018	ES2336398	<0.02	<0.02	<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
Source	0021_MW121	18 Oct 2023	0021_QC112_231018	ES2336399	<0.02	<0.02	<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
Source	0021_MW121	18 Oct 2023	0021_QC212_231018	335876	0.01	0.04	<0.01	0.07	<0.5	<0.1	<0.02	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
Source	0021_MW121	10 Apr 2024	0021_MW121_240410	ES2411994	<0.02	<0.02	<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
Source	0021_MW121	10 Apr 2024	0021_QC111_240410	ES2411994	<0.02	<0.02	<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
Source	0021_MW121	10 Apr 2024	0021_QC211_240410	348825	<0.01	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
Source	0021_MW121	24 Oct 2024	0021_MW121_241024	ES2435541	<0.02	<0.02	<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
Source	0021_MW121	02 Apr 2025	0021_MW121_250402	ES2510113	<0.02	<0.02	<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
Source	0021_MW123	08 May 2017	C_MW07	ES1711220	0.0395	0.524	<0.0005	0.0805	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Source	0021_MW123	26 Oct 2021	0021_MW123_211026	ES2138639	0.05	0.20	<0.02	0.06	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW123	06 Apr 2022	0021_MW123_220406	ES2212442	<0.02	0.10	<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
Source	0021_MW123	14 Oct 2022	0021_MW123_221014	ES2237106	0.03	0.12	<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	<0.05
Source	0021_MW123	21 Apr 2023	0021_MW123_230421	ES2313364	0.04	0.19	<0.02	0.05	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW123	19 Oct 2023	0021_MW123_231019	ES2336398	0.04	0.22	<0.02	0.05	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW123	12 Apr 2024	0021_MW123_240412	ES2411994	0.04	0.15	<0.02	0.05	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW123	22 Oct 2024	0021_MW123_241022	ES2435078	0.03	0.18	<0.02	0.05	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW123	02 Apr 2025	0021_MW123_250402	ES2510113	0.03	0.13	<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	<0.05
Source	0021_MW127	04 May 2017	FC_MW03	ES1711220	0.0032	0.0203	<0.0005	0.008	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Source	0021_MW127	11 Apr 2022	0021_MW127_220411	ES2213156	<0.02	0.06	<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
Source	0021_MW127	11 Oct 2022	0021_MW127_221011	ES2236834	<0.02	0.06	<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
Source	0021_MW127	11 Oct 2022	0021_QC225_221012	931500	<0.01	0.06[#3]	<0.01	0.01[#3]	<0.01	<0.01	<0.01	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.05	<0.01
Source	0021_MW127	01 Feb 2023	0021_MW127_230201	ES2303446	<0.02	0.06	<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
Source	0021_MW127	01 Feb 2023	0021_QC102_230201	ES2303446	<0.02	0.05	<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
Source	0021_MW127	24 Oct 2024	0021_MW127_241024	ES2435541	<0.02	0.08	<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
Source	0021_MW127	02 Apr 2025	0021_MW127_250402	ES2510113	<0.02	0.12	<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
Source	0021_SW001	20 Apr 2017	AB_SW01	ES1709644	0.0245	0.884	0.0015	0.0783	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.0130	<0.001	<0.001	0.007	<0.001
Source	0021_SW001	19 Oct 2021	0021_QC101_211019	ES2138639	0.33	3.07	0.04	0.60	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	0.02	<0.05	<0.05	0.23	<0.05
Source	0021_SW001	19 Oct 2021	0021_SW001_211019	ES2138639	0.33	3.00	0.04	0.57	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	0.02	<0.05	<0.05	0.23	<0.05
Source	0021_SW001	05 Apr 2022	0021_QC101_220405	ES2212442	0.08	0.97	<0.02	0.15	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW001	05 Apr 2022	0021_SW001_220405	ES2212442	0.07	0.80	<0.02	0.13	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW001	07 Jul 2022	0021_QC101_220707	ES2224473	0.10	0.60	<0.02	0.10	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW001	07 Jul 2022	0021_QC201_220707	905309	0.08[#3]	0.60[#3]	0.01	0.10	<0.01	<0.01	<0.01	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.05	<0.01
Source	0021_SW001	07 Jul 2022	0021_SW001_220101	ES2224473	0.12	0.68	<0.02	0.12	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW001	11 Oct 2022	0021_SW001_221011	ES2236834	0.03	0.24	<0.02	0.05	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW001	13 Oct 2022	0021_SW001_221013	ES2237106	0.08	0.49	<0.02	0.10	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW001	01 Feb 2023	0021_SW001_230201	ES2303446	0.06	0.39	<0.02	0.10	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW001	20 Apr 2023	0021_SW001_230420	ES2313364	0.17	1.18	0.02	0.24	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW001	07 Aug 2023	0021_SW001_230807	ES2326593	0.02	0.10	<0.02	0.03	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW001	04 Oct 2023	0021_SW001_231004	ES2334226	0.02	0.18	<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
Source	0021_SW001	18 Oct 2023	0021_SW001_231018	ES2336399	0.04	0.31	<0.02	0.07	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05

				PFAS - Perfluoroalkyl Carboxylic Acids								PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
				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)	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 (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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	µg/L	µg/L
EQL				0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.05	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 2025 Freshwater and Interim Marine 95%																						
PFAS NEMP 2025 Recreational water quality																						
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																		
Source	0021_SW001	10 Apr 2024	0021_SW001_240410	ES2412012	0.06	0.39	<0.02	0.05	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW001	03 Apr 2025	0021_SW001_250403	ES2510622	0.22	1.64	<0.02	0.29	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW027	19 Apr 2017	FC_SW11	ES1709535	0.0013	0.0102	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Source	0021_SW027	21 Oct 2021	0021_SW027_211021	ES2138639	<0.02	<0.02	<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
Source	0021_SW027	06 Apr 2022	0021_SW027_220406	ES2212442	<0.02	<0.02	<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
Source	0021_SW027	12 Oct 2022	0021_SW027_221012	ES2237106	<0.02	0.03	<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
Source	0021_SW027	20 Apr 2023	0021_SW027_230420	ES2313364	<0.02	0.06	<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
Source	0021_SW027	10 Apr 2024	0021_SW027_240410	ES2412012	<0.02	<0.02	<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
Source	0021_SW027	01 Apr 2025	0021_SW027_250401	ES2510622	<0.02	<0.02	<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
Source	0021_SW111	10 Aug 2020	0021_SW111_200810	ES2028286	0.0434	0.397	0.0038	0.0768	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.0106	<0.001	<0.001	0.001	<0.001
Source	0021_SW111	06 Apr 2022	0021_SW111_220406	ES2212442	<0.02	<0.02	<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
Source	0021_SW111	13 Oct 2022	0021_SW111_221013	ES2237106	<0.02	0.13	<0.02	0.05	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW111	20 Apr 2023	0021_SW111_230420	ES2313364	<0.02	0.08	<0.02	0.03	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0020_MW012	17 Apr 2023	0020_MW012_230417	ES2313254	0.05	0.23	0.02	0.07	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0020_MW012	16 Oct 2023	0020_MW012_ 231016	ES2336397	0.02	0.14	<0.02	0.03	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0020_MW012	08 Apr 2024	0020_MW012_240408	ES2411964	0.03	0.12	<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
Pathway	0020_MW012	08 Apr 2024	0020_QC101_240408	ES2411964	0.03	0.14	<0.02	0.03	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0020_MW012	08 Apr 2024	0020_QC201_240408	348827	0.02	0.15	<0.01	0.02	<0.5	<0.1	<0.02	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
Pathway	0020_MW012	21 Oct 2024	0020_MW012_241021	ES2435143	0.04	0.17	<0.02	0.03	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0020_MW012	21 Oct 2024	0020_QC100_241021	ES2435143	0.03	0.16	<0.02	0.03	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0020_MW012	21 Oct 2024	0020_QC200_241021	1154740	0.03	0.17	<0.01	0.04	<0.01	<0.01	<0.01	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.05	<0.01
Pathway	0020_MW012A	10 Apr 2018	0020_MW12_180410	ES1810721	0.0264	0.189	0.0059	0.0256	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Pathway	0020_MW012A	03 May 2018	0020_MW12_180503	ES1812871	0.03	0.19	<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
Pathway	0020_MW012A	15 Oct 2021	0020_MW012_211015	ES2138638	0.03	0.16	<0.02	0.03	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0020_MW012A	04 Apr 2022	0020_MW012_220404	ES2212597	0.03	0.15	<0.02	0.08	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0020_MW012A	10 Oct 2022	0020_MW012_221010	ES2237104	0.03	0.19	<0.02	0.06	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0020_MW012A	30 Jan 2023	0020_MW012A_230130	ES2303447	0.03	0.20	<0.02	0.06	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0020_MW012A	08 Apr 2025	0020_MW012_250408	ES2510618	0.02	0.10	<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
Pathway	0020_MW055	12 Apr 2022	0020_MW055_220412	ES2213152	<0.02	0.05	<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
Pathway	0020_MW055	10 Oct 2022	0020_MW055_221010	ES2236866	<0.02	<0.02	<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
Pathway	0020_MW055	31 Jan 2023	0020_MW055_230131	ES2303447	<0.02	<0.02	<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
Pathway	0020_MW056	12 Apr 2022	0020_MW056_220412	ES2213152	<0.02	0.06	<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
Pathway	0020_MW056	10 Oct 2022	0020_MW056_221010	ES2236866	<0.02	0.02	<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
Pathway	0020_MW056	10 Oct 2022	0020_QC122_221010	ES2236866	<0.02	0.02	<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
Pathway	0020_MW056	30 Jan 2023	0020_MW056_230130	ES2303447	<0.02	0.02	<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
Pathway	0020_MW056	21 Oct 2024	0020_MW056_241021	ES2435143	<0.02	<0.02	<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
Pathway	0020_MW057	12 Apr 2022	0020_MW057_220412	ES2213152	<0.02	0.18	<0.02	0.06	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0020_MW057	10 Oct 2022	0020_MW057_221010	ES2236866	<0.02	0.09	<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	<0.05
Pathway	0020_MW057	30 Jan 2023	0020_MW057_230130	ES2303447	<0.02	0.03	<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	0.07	<0.05
Pathway	0020_MW057	21 Oct 2024	0020_MW057_241021	ES2435143	<0.02	<0.02	<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
Pathway	0020_MW057	31 Mar 2025	0020_MW057_250331	ES2510618	<0.02	<0.02	<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
Pathway	0020_MW058	12 Apr 2022	0020_MW058_220412	ES2213152	0.05	0.25	<0.02	0.07	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0020_MW058	12 Apr 2022	0020_QC201_220412	880529	0.04	0.20	0.02	0.05	<0.01	<0.01	<0.01	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.05	<0.01
Pathway	0020_MW058	10 Oct 2022	0020_MW058_221010	ES2236866	<0.02	0.06	<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
Pathway	0020_MW058	10 Oct 2022	0020_QC222_221010	931497	0.01[#3]	0.05[#3]	0.01	0.01[#3]	<0.01	<0.01	<0.01	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.05	<0.01
Pathway	0020_MW058	30 Jan 2023	0020_MW058_230130	ES2303447	0.05	0.15	<0.02	0.07	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0020_MW058	30 Jan 2023	0020_QC200_230130	961653	0.06[#3]	0.16[#3]	0.02	0.06[#3]	<0.01	<0.01	<0.01	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.05	<0.01
Pathway	0020_MW058	21 Oct 2024	0020_MW058_241021	ES2435143	0.05	0.13	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	<0.05
Pathway	0020_MW058	03 Apr 2025	0020_MW058_250403	ES2510618	<0.02	0.02	<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
Pathway	0020_MW058	03 Apr 2025	0020_QC137_250403	ES2510618	<0.02	0.02	<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
Pathway	0020_MW058	03 Apr 2025	0020_QC237_250403	1209674	0.02	0.03	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	<0.01	<0.05	<0.01
Pathway	0020_MW059	12 Apr 2022	0020_MW059_220412	ES2213152	<0.02	0.04	<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
Pathway	0020_MW059	10 Oct 2022	0020_MW059_221010	ES2236866	<0.02	0.04	<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
Pathway	0020_MW059	30 Jan 2023	0020_MW059_230130	ES2303447	0.02	0.10	<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	<0.05
Pathway	0020_MW059	30 Jan 2023	0020_QC100_230130	ES2303447	0.02	0.09	<0.02	0.03	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0020_MW059	21 Oct 2024	0020_MW059_241021	ES2435143	<0.02	0.02	<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
Pathway	0020_MW059	31 Mar 2025	0020_MW059_250331	ES2510618	<0.02	<0.02	<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
Pathway	0020_MW071	24 Apr 2025	0020_MW071_250424	ES2512752	<0.02	<0.02	<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
Pathway	0020_MW102D	10 Apr 2018	CL_MW02_180410	ES1810721	<0.0020[#4]	0.0112	<0.0020[#4]	<0.0020[#4]	<0.0050[#4]	<0.0020[#4]	<0.0020[#4]	-	<0.005[#4]	<0.0020[#4]	<0.005[#4]	<0.005[#4]	<0.0020[#4]	<0.005[#4]	<0.0020[#4]	<0.002[#4]	<0.002[#4]	<0.002[#4]	<0.002[#4]
Pathway	0020_MW102D	10 Apr 2018	CL_QC211_180410	594255	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.005	0.001
Pathway	0020_MW102D	02 May 2018	CL_MW02_180502	ES1812871	<0.02	0.03	<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

				PFAS - Perfluoroalkyl Carboxylic Acids								PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
				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)	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 (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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	µg/L	µg/L
EQL				0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.05	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 2025 Freshwater and Interim Marine 95%																						
PFAS NEMP 2025 Recreational water quality																						
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																		
Pathway	0020_MW102D	18 Oct 2021	0020_MW102_211018	ES2138638	<0.02	0.03	<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
Pathway	0020_MW102D	04 Apr 2022	0020_MW102_220404	ES2212597	<0.02	0.05	<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
Pathway	0020_MW102D	10 Oct 2022	0020_MW102_221010	ES2237104	<0.02	0.03	<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
Pathway	0020_MW102D	10 Oct 2022	0020_QC201_221010	308190	<0.01	0.02	<0.01	<0.02	<0.5	<0.1	<0.02	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
Pathway	0020_MW102D	17 Apr 2023	0020_MW102D_230417	ES2313254	<0.02	0.04	<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
Pathway	0020_MW102D	16 Oct 2023	0020_MW102D_ 231016	ES2336397	<0.02	0.02	<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
Pathway	0020_MW102D	16 Oct 2023	0020_QC100_ 231016	ES2336397	<0.02	0.02	<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
Pathway	0020_MW102D	16 Oct 2023	0020_QC200_231016	335710	<0.01	0.03	<0.01	<0.02	<0.5	<0.1	<0.02	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
Pathway	0020_MW102D	08 Apr 2024	0020_MW102D_240408	ES2411964	0.02	0.15	<0.02	0.05	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0020_MW102D	22 Oct 2024	0020_MW102D_241022	ES2435143	<0.02	<0.02	<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
Pathway	0020_MW102D	22 Oct 2024	0020_QC253_241022	1154740	<0.01	0.02	<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	<0.01	<0.05	<0.01
Pathway	0020_MW102D	31 Mar 2025	0020_MW102D_250331	ES2510618	<0.02	<0.02	<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
Pathway	0020_MW102S	22 Oct 2024	0020_MW102S_241022	ES2435143	<0.02	0.02	<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
Pathway	0020_MW102S	31 Mar 2025	0020_MW102S_250331	ES2510618	<0.02	<0.02	<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
Pathway	0020_MW104	10 Apr 2018	CL_MW04_180410	ES1810721	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Pathway	0020_MW104	22 Oct 2024	0020_MW104_241022	ES2435143	<0.02	<0.02	<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
Pathway	0020_MW104	22 Oct 2024	0020_QC153_241022	ES2435143	<0.02	<0.02	<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
Pathway	0020_MW104	03 Apr 2025	0020_MW104_250403	ES2510618	<0.02	<0.02	<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
Pathway	0020_MW104	03 Apr 2025	0020_QC138_250403	ES2510618	<0.02	<0.02	<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
Pathway	0020_MW104	03 Apr 2025	0020_QC238_250403	1209674	<0.01	<0.01	<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	<0.01	<0.05	<0.01
Pathway	0020_MW105	10 Apr 2018	CL_MW05_180410	ES1810721	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Pathway	0020_MW105	15 Oct 2021	0020_MW105_211015	ES2138638	<0.02	<0.02	<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
Pathway	0020_MW105	04 Apr 2022	0020_MW105_220404	ES2212597	<0.02	<0.02	<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
Pathway	0020_MW105	10 Oct 2022	0020_MW105_221010	ES2237104	<0.02	<0.02	<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
Pathway	0020_MW105	17 Apr 2023	0020_MW105_230417	ES2313254	<0.02	<0.02	<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
Pathway	0020_MW105	16 Oct 2023	0020_MW105_ 231016	ES2336397	<0.02	<0.02	<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
Pathway	0020_MW105	08 Apr 2024	0020_MW105_240408	ES2411964	<0.02	<0.02	<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
Pathway	0020_SW011	18 Apr 2017	CL_SW08	ES1709535	0.002	0.0125	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Pathway	0020_SW011	18 Apr 2017	JCQA02	ES1709535	0.0019	0.0114	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Pathway	0020_SW011	01 May 2018	CL_SW08_180501	ES1812871	0.0051	0.0145	<0.0005	0.0029	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	0.002	<0.001
Pathway	0020_SW011	21 Oct 2021	0020_SW011_211021	ES2138638	<0.02	0.05	<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
Pathway	0020_SW011	04 Apr 2022	0020_SW011_220404	ES2212597	<0.02	0.02	<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
Pathway	0020_SW011	07 Jul 2022	0020_SW011_220707	ES2224472	<0.02	<0.02	<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
Pathway	0020_SW011	10 Oct 2022	0020_SW011_221012	ES2236866	<0.02	0.03	<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
Pathway	0020_SW011	12 Oct 2022	0020_SW011_221012	ES2237104	<0.02	0.02	<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
Pathway	0020_SW011	01 Feb 2023	0020_SW011_230201	ES2303447	<0.02	<0.02	<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
Pathway	0020_SW011	17 Apr 2023	0020_SW011_230417	ES2313254	<0.02	0.02	<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
Pathway	0020_SW011	16 Oct 2023	0020_SW011_ 231016	ES2336397	<0.02	<0.02	<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
Pathway	0020_SW011	08 Apr 2024	0020_SW011_240408	ES2411964	<0.02	<0.02	<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
Pathway	0020_SW011	23 Oct 2024	0020_SW011_241023	ES2435143	<0.02	<0.02	<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
Pathway	0020_SW011	02 Apr 2025	0020_SW011_250402	ES2510618	<0.02	<0.02	<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
Pathway	0020_SW057	12 Apr 2022	0020_QC113_220412	ES2213152	<0.02	0.02	<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
Pathway	0020_SW057	12 Apr 2022	0020_SW057_220412	ES2213152	<0.02	0.02	<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
Pathway	0020_SW057	07 Jul 2022	0020 SW057_220707	ES2224472	<0.02	<0.02	<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
Pathway	0020_SW057	10 Oct 2022	0020_SW057_221010	ES2236866	<0.02	<0.02	<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
Pathway	0020_SW057	30 Jan 2023	0020_SW057_230130	ES2303447	<0.02	0.04	<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
Pathway	0020_SW057	21 Oct 2024	0020_SW057_241021	ES2435143	<0.02	<0.02	<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
Pathway	0020_SW057	31 Mar 2025	0020_QC100_250331	ES2510618	<0.02	<0.02	<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
Pathway	0020_SW057	31 Mar 2025	0020_QC200_250331	1209674	<0.01	<0.01	<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	<0.01	<0.05	<0.01
Pathway	0020_SW057	31 Mar 2025	0020_SW057_250331	ES2510618	<0.02	<0.02	<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
Pathway	0021_MW018	04 May 2017	MW018	ES1711220	0.0023	0.017	<0.0005	0.0049	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Pathway	0021_MW018	22 Oct 2024	0021_MW018_241022	ES2435078	<0.02	<0.02	<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
Pathway	0021_MW018	02 Apr 2025	0021_MW018_250402	ES2510113	<0.02	<0.02	<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
Pathway	0021_MW108	08 May 2017	A_MW08	ES1711220	0.0345	1.04	<0.0005	0.141	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Pathway	0021_MW108	19 Oct 2021	0021_MW108_211019	ES2138639	0.06	0.60	<0.02	0.11	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_MW108	06 Apr 2022	0021_MW108_220406	ES2212442	0.07	0.75	<0.02	0.15	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_MW108	13 Oct 2022	0021_MW108_221013	ES2237106	0.10	0.78	<0.02	0.18	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_MW108	20 Apr 2023	0021_MW108_230420	ES2313364	0.13	1.03	<0.02	0.24	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_MW108	18 Oct 2023	0021_MW108_231018	ES2336398	0.05	0.46	<0.02	0.08	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_MW108	11 Apr 2024	0021_MW108_240411	ES2411994	0.08	0.52	<0.02	0.10	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_MW108	28 Oct 2024	0021_MW108_241028	ES2435541	0.05	0.47	<0.02	0.11	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05

					PFAS - Perfluoroalkyl Carboxylic Acids								PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					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)	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 (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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	µg/L	µg/L
EQL					0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.05	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 2025 Freshwater and Interim Marine 95%																							
PFAS NEMP 2025 Recreational water quality																							
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																			
Pathway	0021_MW108	04 Apr 2025	0021_MW108_250404	ES2510113	0.04	0.25	<0.02	0.06	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_MW124	04 May 2017	CL_MW01	ES1711220	0.0054	0.0286	0.0007	0.0116	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Pathway	0021_MW124	03 May 2018	CL_MW01_180503	ES1812871	<0.02	<0.02	<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
Pathway	0021_MW124	03 May 2018	CL_QC114_180503	ES1812871	<0.02	0.03	<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
Pathway	0021_MW124	20 Oct 2021	0021_MW124_211020	ES2138639	<0.02	0.02	<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
Pathway	0021_MW124	06 Apr 2022	0021_MW124_220406	ES2212442	<0.02	0.05	<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
Pathway	0021_MW124	11 Oct 2022	0021_MW124_221011	ES2237106	<0.02	0.04	<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
Pathway	0021_MW124	01 Feb 2023	0021_MW124_230201	ES2303446	<0.02	0.05	<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
Pathway	0021_MW124	17 Apr 2023	0021_MW124_230417	ES2313364	<0.02	0.05	<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
Pathway	0021_MW124	16 Oct 2023	0021_MW124_231016	ES2336398	<0.02	0.03	<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
Pathway	0021_MW124	10 Apr 2024	0021_MW124_240410	ES2411994	<0.02	<0.02	<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
Pathway	0021_MW124	22 Oct 2024	0021_MW124_241022	ES2435078	<0.02	<0.02	<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
Pathway	0021_MW124	02 Apr 2025	0021_MW125_250402	ES2510113	<0.02	<0.02	<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
Pathway	0021_MW124	03 Apr 2025	0021_MW124_250403	ES2510113	<0.02	<0.02	<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
Pathway	0021_MW134	04 May 2017	TC_MW01	ES1711220	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Pathway	0021_MW134	11 Apr 2022	0021_MW134_220411	ES2213156	<0.02	<0.02	<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
Pathway	0021_MW134	11 Apr 2022	0021_QC200_220411	880531	<0.01	<0.01	<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	<0.01	<0.05	<0.01
Pathway	0021_MW134	11 Oct 2022	0021_MW134_221011	ES2236834	<0.02	<0.02	<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
Pathway	0021_MW134	01 Feb 2023	0021_MW134_230201	ES2303446	<0.02	<0.02	<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
Pathway	0021_MW134	24 Oct 2024	0021_MW134_241024	ES2435541	<0.02	<0.02	<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
Pathway	0021_MW134	08 Apr 2025	0021_MW134_250408	ES2510113	<0.02	<0.02	<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
Pathway	0021_SW013	18 Apr 2017	CL_SW09	ES1709535	0.005	0.0305	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Pathway	0021_SW013	30 Apr 2018	CL_SW09_180430	ES1812871	0.0097	0.0407	0.0013	0.0070	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	0.004	<0.001
Pathway	0021_SW013	20 Oct 2021	0021_SW013_211020	ES2138639	<0.02	0.08	<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
Pathway	0021_SW013	06 Apr 2022	0021_SW013_220406	ES2212442	<0.02	0.05	<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
Pathway	0021_SW013	10 Oct 2022	0021_SW013_221010	ES2237106	<0.02	0.05	<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
Pathway	0021_SW013	17 Apr 2023	0021_SW013_230417	ES2313364	<0.02	0.05	<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
Pathway	0021_SW013	16 Oct 2023	0021_SW013_231016	ES2336399	<0.02	0.03	<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
Pathway	0021_SW013	10 Apr 2024	0021_QC106_240410	ES2412012	<0.02	<0.02	<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
Pathway	0021_SW013	10 Apr 2024	0021_QC206_240410	348825	<0.01	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
Pathway	0021_SW013	10 Apr 2024	0021_SW013_240410	ES2412012	<0.02	<0.02	<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
Pathway	0021_SW013	22 Oct 2024	0021_SW013_241022	ES2435078	<0.02	0.03	<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
Pathway	0021_SW013	01 Apr 2025	0021_SW013_250401	ES2510622	<0.02	<0.02	<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
Pathway	0021_SW019	20 Apr 2017	DC_SW04	ES1709644	0.0252	0.986	0.0016	0.0694	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.0051	<0.001	<0.001	0.003	<0.001
Pathway	0021_SW019	19 Oct 2021	0021_SW019_211019	ES2138639	<0.02	0.08	<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
Pathway	0021_SW019	05 Apr 2022	0021_QC203_220405	293031	0.08	0.68	0.01	0.2	<0.5	<0.1	<0.02	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
Pathway	0021_SW019	05 Apr 2022	0021_SW019_220405	ES2212442	0.08	0.80	<0.02	0.15	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_SW019	07 Jul 2022	0021_SW019_220707	ES2224473	0.06	0.34	<0.02	0.08	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_SW019	13 Oct 2022	0021_SW019_221013	ES2237106	0.06	0.42	<0.02	0.12	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_SW019	01 Feb 2023	0021_SW019_230201	ES2303446	0.08	0.65	<0.02	0.24	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_SW019	20 Apr 2023	0021_SW019_230420	ES2313364	0.07	0.51	<0.02	0.15	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_SW019	11 Apr 2024	0021_SW019_240411	ES2412012	0.05	0.32	<0.02	0.08	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_SW019	03 Apr 2025	0021_SW019_250403	ES2510622	0.05	0.30	<0.02	0.11	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_SW021	13 Apr 2017	DC_SW06	ES1709064	0.0420	0.229	0.0042	0.0261	<0.0005	<0.0005	0.0010	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.0038	<0.001	<0.001	<0.001	<0.001
Pathway	0021_SW021	20 Oct 2021	0021_SW021_211020	ES2138639	0.04	0.29	<0.02	0.07	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_SW021	06 Apr 2022	0021_SW021_220406	ES2212442	<0.02	<0.02	<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
Pathway	0021_SW021	07 Jul 2022	0021_SW021_220707	ES2224473	<0.02	0.08	<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
Pathway	0021_SW021	14 Oct 2022	0021_SW021_221014	ES2237106	<0.02	0.14	<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	<0.05
Pathway	0021_SW021	12 Apr 2024	0021_SW021_240412	ES2412012	0.03	0.14	<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
Pathway	0021_SW021	02 Apr 2025	0021_QC106_250402	ES2510113	<0.02	0.04	<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
Pathway	0021_SW021	02 Apr 2025	0021_QC206_250402	1210052	<0.01	0.05	<0.01	0.02	<0.01	<0.01	<0.01	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.05	<0.01
Pathway	0021_SW021	02 Apr 2025	0021_SW021_250402	ES2510622	<0.02	0.05	<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
Pathway	0021_SW126	20 Aug 2020	0021_SW126_200820	EW2003840	0.192	1.19	0.0149	0.556	<0.0005	<0.0005	0.0010	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.0055	<0.001	<0.001	0.069	0.003
Pathway	0021_SW126	19 Oct 2021	0021_SW126_211019	ES2138639	0.09	0.44	<0.02	0.33	<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
Pathway	0021_SW126	05 Apr 2022	0021_SW126_220405	ES2212442	0.06	0.55	<0.02	0.21	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_SW126	13 Oct 2022	0021_SW126_221013	ES2237106	0.04	0.26	<0.02	0.13	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_SW126	20 Apr 2023	0021_SW126_230420	ES2313364	0.06	0.20	<0.02	0.15	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_SW126	18 Oct 2023	0021_SW126_231018	ES2336399	0.04	0.17	<0.02	0.07	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_SW126	11 Apr 2024	0021_QC114_240411	ES2412012	0.07	0.71	<0.02	0.19	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_SW126	11 Apr 2024	0021_QC214_240411	348825	0.06	0.64	<0.01	0.2	<0.5	<0.1	<0.02	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
Pathway	0021_SW126	11 Apr 2024	0021_SW126_240411	ES2412012	0.07	0.72	<0.02	0.18	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05

					PFAS - Perfluoroalkyl Carboxylic Acids								PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					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)	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 (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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	µg/L	µg/L
EQL					0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.05	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 2025 Freshwater and Interim Marine 95%																							
PFAS NEMP 2025 Recreational water quality																							
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																			
Pathway	0021_SW126	03 Apr 2025	0021_SW126_250403	ES2510623	0.12	0.74	<0.02	0.30	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Receptor	0020_SW004	18 Apr 2017	CL_SW01	ES1709535	0.0009	0.0044	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Receptor	0020_SW004	01 May 2018	CL_SW01_180501	ES1812871	0.0091	0.0529	0.0008	0.0172	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	0.001	<0.001
Receptor	0020_SW004	18 Oct 2021	0020_SW004_211018	ES2138638	<0.02	0.02	<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
Receptor	0020_SW004	04 Apr 2022	0020_SW004_220404	ES2212597	<0.02	<0.02	<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
Receptor	0020_SW004	07 Jul 2022	0020_SW004_220101	ES2224472	<0.02	<0.02	<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
Receptor	0020_SW004	11 Oct 2022	0020_SW004_221011	ES2237104	<0.02	<0.02	<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
Receptor	0020_SW004	30 Jan 2023	0020_SW004_230130	ES2303447	<0.02	0.02	<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
Receptor	0020_SW004	17 Apr 2023	0020_SW004_230417	ES2313254	<0.02	<0.02	<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
Receptor	0020_SW004	16 Oct 2023	0020_SW004_ 231016	ES2336397	<0.02	<0.02	<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
Receptor	0020_SW004	08 Apr 2024	0020_SW004_240408	ES2411964	<0.02	<0.02	<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
Receptor	0020_SW004	25 Oct 2024	0020_SW004_241025	ES2435539	<0.02	<0.02	<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
Receptor	0020_SW004	31 Mar 2025	0020_SW004_250331	ES2510618	<0.02	<0.02	<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
Receptor	0020_SW005	18 Apr 2017	CL_SW02	ES1709535	0.0018	0.0104	0.0006	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Receptor	0020_SW005	01 May 2018	CL_SW02_180501	ES1812871	0.0094	0.0545	0.0007	0.0192	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	0.001	<0.001
Receptor	0020_SW005	18 Oct 2021	0020_SW005_211018	ES2138638	<0.02	0.02	<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
Receptor	0020_SW005	04 Apr 2022	0020_SW005_220404	ES2212597	<0.02	0.04	<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
Receptor	0020_SW005	11 Oct 2022	0020_SW005_221011	ES2237104	<0.02	0.03	<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
Receptor	0020_SW005	17 Apr 2023	0020_SW005_230417	ES2313254	0.02	0.12	<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	<0.05
Receptor	0020_SW005	16 Oct 2023	0020_SW005_ 231016	ES2336397	<0.02	0.02	<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
Receptor	0020_SW005	08 Apr 2024	0020_SW005_240408	ES2411964	<0.02	<0.02	<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
Receptor	0020_SW005	25 Oct 2024	0020_SW005_241025	ES2435539	<0.02	<0.02	<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
Receptor	0020_SW005	31 Mar 2025	0020_SW005_250331	ES2510618	<0.02	<0.02	<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
Receptor	0020_SW010	18 Apr 2017	CL_SW07	ES1709535	0.0015	0.0092	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Receptor	0020_SW010	01 May 2018	CL_QC221_180501	597346	<0.01[#3]	0.05[#3]	<0.01	0.02[#3]	<0.01	<0.01	<0.01	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.05	<0.01
Receptor	0020_SW010	01 May 2018	CL_SW07_180501	ES1812871	0.0094	0.0540	0.0009	0.0182	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	0.002	<0.001
Receptor	0020_SW010	18 Oct 2021	0020_SW010_211018	ES2138638	<0.02	0.03	<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
Receptor	0020_SW010	04 Apr 2022	0020_SW010_220404	ES2212597	<0.02	<0.02	<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
Receptor	0020_SW010	07 Jul 2022	0020_SW010_220101	ES2224472	<0.02	<0.02	<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
Receptor	0020_SW010	10 Oct 2022	0020_SW010_221012	ES2236866	<0.02	<0.02	<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
Receptor	0020_SW010	12 Oct 2022	0020_SW010_221012	ES2237104	<0.02	<0.02	<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
Receptor	0020_SW010	30 Jan 2023	0020_QC120_230130	ES2303447	<0.02	0.02	<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
Receptor	0020_SW010	30 Jan 2023	0020_SW010_230130	ES2303447	<0.02	0.02	<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
Receptor	0020_SW010	17 Apr 2023	0020_SW010_230417	ES2313254	<0.02	<0.02	<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
Receptor	0020_SW010	16 Oct 2023	0020_SW010_ 231016	ES2336397	<0.02	<0.02	<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
Receptor	0020_SW010	08 Apr 2024	0020_SW010_240408	ES2411964	<0.02	0.02	<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
Receptor	0020_SW010	25 Oct 2024	0020_QC110_241025	ES2435539	<0.02	<0.02	<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
Receptor	0020_SW010	25 Oct 2024	0020_QC210_241025	1156671	<0.01	0.01	<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	<0.01	<0.05	<0.01
Receptor	0020_SW010	25 Oct 2024	0020_SW010_241025	ES2435539	<0.02	<0.02	<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
Receptor	0020_SW010	31 Mar 2025	0020_SW010_250331	ES2510618	<0.02	<0.02	<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
Receptor	0020_SW012	26 Mar 2018	CL_QC206_180326	592055	<0.001	0.001[#3]	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.005	<0.001
Receptor	0020_SW012	26 Mar 2018	CL_SW12_180326	ES1809241	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Receptor	0020_SW012	15 May 2018	CL_SW12_180515	ES1814324	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Receptor	0020_SW012	18 Oct 2021	0020_SW012_211018	ES2138638	<0.02	<0.02	<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
Receptor	0020_SW012	04 Apr 2022	0020_SW012_220404	ES2212597	<0.02	<0.02	<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
Receptor	0020_SW012	11 Oct 2022	0020_SW012_221011	ES2237104	<0.02	<0.02	<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
Receptor	0020_SW012	17 Apr 2023	0020_SW012_230417	ES2313254	<0.02	<0.02	<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
Receptor	0020_SW012	16 Oct 2023	0020_SW012_ 231016	ES2336397	<0.02	<0.02	<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
Receptor	0020_SW012	08 Apr 2024	0020_QC104_240408	ES2411964	<0.02	<0.02	<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
Receptor	0020_SW012	08 Apr 2024	0020_QC204_240408	348827	<0.01	0.02	<0.01	<0.02	<0.5	<0.1	<0.02	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
Receptor	0020_SW012	08 Apr 2024	0020_SW012_240408	ES2411964	<0.02	<0.02	<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
Receptor	0020_SW012	25 Oct 2024	0020_SW012_241025	ES2435539	<0.02	<0.02	<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
Receptor	0020_SW012	31 Mar 2025	0020_SW012_250331	ES2510618	<0.02	<0.02	<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

	PFAS - Perfluoroalkyl Carboxylic Acids								PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
	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)	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 (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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	µg/L	µg/L
EQL	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.05	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 2025 Freshwater and Interim Marine 95%																			
PFAS NEMP 2025 Recreational water quality																			
Statistics																			
Number of Results	358	358	358	358	358	358	358	2	358	358	358	358	358	358	358	358	358	358	358
Number of Detects	133	232	31	148	0	0	2	0	0	0	0	0	0	0	7	0	0	16	2
Minimum Concentration	<0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.05	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	0.001	0.001
Minimum Detect	0.0006	0.001	0.0005	0.002	ND	ND	0.001	ND	ND	ND	ND	ND	ND	ND	0.0038	ND	ND	0.001	0.001
Maximum Concentration	2.2	10.7	0.07	1.44	<0.5	<0.1	<0.02	<0.05	<0.1	<0.05	<0.5	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	0.23	<0.05
Maximum Detect	2.2	10.7	0.07	1.44	ND	ND	0.001	ND	ND	ND	ND	ND	ND	ND	0.02	ND	ND	0.23	0.003
Average Concentration *	0.047	0.28	0.0098	0.058	0.03	0.01	0.0087	0.025	0.023	0.0097	0.031	0.022	0.0097	0.022	0.011	0.021	0.021	0.024	0.021
Geometric Average *	0.014	0.045	0.0073	0.018	0.016	0.007	0.0066	0.025	0.017	0.0072	0.018	0.017	0.0072	0.017	0.0081	0.015	0.014	0.017	0.015
Median Concentration *	0.01	0.03	0.01	0.01	0.025	0.01	0.01	0.025	0.025	0.01	0.025	0.025	0.01	0.025	0.01	0.025	0.025	0.025	0.025
Standard Deviation *	0.18	0.93	0.0073	0.14	0.045	0.0086	0.0031	0	0.0092	0.0046	0.045	0.0075	0.0046	0.0075	0.009	0.0087	0.009	0.021	0.0087
Geometric Standard Deviation *	3.7	6.8	2.8	4.6	4.6	3.3	3	1	3.3	3.1	3.6	3.2	3.1	3.2	3.1	3.4	3.5	3.1	3.3
95% UCL (Student's-t) *	0.0624	0.361	0.0104	0.0703	0.0341	0.011	0.00899	0.025	0.0242	0.0101	0.0351	0.0231	0.0101	0.0231	0.0122	0.0216	0.0214	0.026	0.0216
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	37	65	9	41	0	0	1	0	0	0	0	0	0	0	2	0	0	4	1
% of Non-Detects	63	35	91	59	100	100	99	100	100	100	100	100	100	100	98	100	100	96	99
% 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 Refer to Table 8 in PFAS NEMP 2025 for comments and notes
#2 Refer to Table 4 in PFAS NEMP 3.0 (2025) for comments and notes
#3 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.
#4 Reported Analyte LOR is higher than Requested Analyte LOR

Environmental Standards

HEPA, March 2025, PFAS NEMP 2025 Freshwater and Interim Marine 95%
HEPA, March 2025, PFAS NEMP 2025 Recreational water quality

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids						PFAS - Perfluoroalk				
					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)	Perfluorononane sulfonate (PFNS)	Perfluorodecanesulfonic acid (PFDS)	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	µg/L	µg/L
EQL					0.0001	0.0005	0.0005	0.0003	0.0003	0.001	0.0003	0.001	0.0005	0.01	0.0005	0.0005	0.01	0.0005	0.002	0.0005	0.0005	0.0005	0.0005
0020_0021_Human health consumption of biota					**0.01**	**0.01**					**0.01**												
PFAS NEMP 2025 Freshwater and Interim Marine 95%					0.13		220																
PFAS NEMP 2025 Recreational water quality					2	2	10				2												
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																			
Receptor	0021_MW020	01 May 2017	MW020		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				ES1710866	0.0028	0.0009	<0.0005	0.0037	0.0037	-	0.0037	-	<0.0005	-	<0.0005	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		14 Feb 2019	0021_MW020_190214	ES1905115	**0.0108**	0.0015	<0.0005	0.0203	0.0203	-	**0.0123**	-	<0.0005	-	<0.0005	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
			0021_QC210_190214	641508	0.0083	0.001	<0.001	0.0183	0.0183	-	0.0093	-	<0.001	-	<0.001	<0.001	-	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001
		29 May 2019	0021_MW020_190529		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				ES1916831	0.0099	0.0050	<0.0005	0.0156	0.0149	-	**0.0149**	-	<0.0005	-	<0.0005	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
			0021_QC200_190529	660059	0.0048	0.004	<0.001	<0.1	<0.05	<0.01	<0.01	<0.01	<0.001	-	<0.001	<0.001	-	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001
		23 Oct 2024	0021_MW020		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			0021_MW020_241023	ES2435078	<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
		02 Apr 2025	0021_MW020_250402	ES2510113	<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
	0021_SW076	22 Mar 2018	UN2_QC102_180322	ES1808818	0.0016	0.0006	<0.0005	0.0022	0.0022	-	0.0022	-	<0.0005	-	<0.0005	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
			UN2_SW01_180322		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				ES1808818	0.0017	0.0008	<0.0005	0.0025	0.0025	-	0.0025	-	<0.0005	-	<0.0005	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		11 Feb 2019	UN2_QC202_190211	640876	0.0028[#1]	<0.001	<0.001	<0.005	<0.005	-	0.0028	-	<0.001	-	<0.001	<0.001	-	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001
			UN2_SW01_190211	ES1904669	0.0022	0.0008	<0.0005	0.0035	0.0035	-	0.003	-	<0.0005	-	<0.0005	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	0.0005
		18 Mar 2019	UN2_SW01_190318	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]	-	<0.0020[#2]	<0.002	<0.0020[#2]	<0.0020[#2]	<0.0020[#2]	<0.0020[#2]
		12 Oct 2022	0021_SW076_221012	ES2237106	<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
		19 Apr 2023	0021_SW076_230419	ES2313355	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				ES2313356	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				ES2313364	<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
		18 Oct 2023	0021_SW076_231018	ES2336399	<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
		10 Apr 2024	0021_QC105_240410	ES2412012	<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
			0021_QC205_240410	348825	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	-	<0.01	-	<0.02	<0.01	-	<0.01	<0.02	<0.02	<0.05	<0.01	<0.01
			0021_SW076_240410	ES2412012	<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
		23 Oct 2024	0021_QC254_241023	1154751	<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	<0.05	<0.01	<0.01	<0.01	<0.01
			0021_SW076_241023	ES2435078	<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
		02 Apr 2025	0021_SW076_250402	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	<0.02	<0.02	<0.02
	0021_SW077	22 Mar 2018	UN2_QC202_180322	591340	0.0033	0.004	<0.001	0.0073	0.0073	-	0.0073	-	<0.001	-	<0.001	<0.001	-	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001
			UN2_SW02_180322		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				ES1808818	0.0018	0.0029	<0.0005	0.0047	0.0047	-	0.0047	-	<0.0005	-	<0.0005	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		11 Feb 2019	UN2_SW02_190211	ES1904669	0.003	0.0052	<0.0005	0.0082	0.0082	-	0.0082	-	<0.0005	-	<0.0005	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		18 Mar 2019	UN2_QC105_190318	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]	-	<0.0020[#2]	<0.002	<0.0020[#2]	<0.0020[#2]	<0.0020[#2]	<0.0020[#2]
			UN2_SW02_190318	ES1908940	0.0034	0.0030	<0.0020[#2]	0.0064	0.0064	-	0.0064	-	<0.0020[#2]	-	<0.0020[#2]	<0.0020[#2]	-	<0.0020[#2]	<0.002	<0.0020[#2]	<0.0020[#2]	<0.0020[#2]	<0.0020[#2]
		11 Oct 2022	0021_SW077_221012	ES2237759	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		12 Oct 2022	0021_SW077_221012	ES2237106	<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
		19 Apr 2023	0021_QC105_230419	ES2313364	<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
			0021_QC205_230419	321517	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	-	<0.01	-	<0.02	<0.01	-	<0.01	<0.02	<0.02	<0.05	<0.01	<0.01
			0021_SW077_230419	ES2313355	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				ES2313356	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				ES2313364	<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
		18 Oct 2023	0021_SW077_231018	ES2336399	<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
		10 Apr 2024	0021_SW077_240410	ES2412012	<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

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids						PFAS - Perfluoroalk				
					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)	Perfluorononane sulfonate (PFNS)	Perfluorodecanesulfonic acid (PFDS)	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	µg/L	µg/L
EQL					0.0001	0.0005	0.0005	0.0003	0.0003	0.001	0.0003	0.001	0.0005	0.01	0.0005	0.0005	0.01	0.0005	0.002	0.0005	0.0005	0.0005	0.0005
0020_0021_Human health consumption of biota					**0.01**	**0.01**					**0.01**												
PFAS NEMP 2025 Freshwater and Interim Marine 95%					0.13		220																
PFAS NEMP 2025 Recreational water quality					2	2	10				2												
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																			
Receptor	0021_SW078	22 Mar 2018	UN2_SW03_180322		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				ES1808818	0.0054	0.0087	<0.0005	0.0175	0.0175	-	**0.0141**	-	<0.0005	-	<0.0005	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		11 Feb 2019	UN2_QC102_190211	ES1904669	0.0091	**0.0118**	<0.0005	0.0219	0.0219	-	**0.0209**	-	<0.0005	-	<0.0005	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	0.001
			UN2_SW03_190211	ES1904669	0.0083	**0.0115**	<0.0005	0.0208	0.0208	-	**0.0198**	-	<0.0005	-	<0.0005	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	0.001
		18 Mar 2019	UN2_SW03_190318	ES1908940	0.0070	0.0072	<0.0020[#2]	0.0142	0.0142	-	**0.0142**	-	<0.0020[#2]	-	<0.0020[#2]	<0.0020[#2]	-	<0.0020[#2]	<0.002	<0.0020[#2]	<0.0020[#2]	<0.0020[#2]	<0.0020[#2]
		12 Oct 2022	0021_SW078_221012	ES2237106	**0.01**	**0.02**	<0.01	0.03	0.03	-	**0.03**	-	<0.02	-	<0.02	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02
				ES2237759	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		19 Apr 2023	0021_SW078_230419	ES2313355	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				ES2313356	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				ES2313364	**0.03**	**0.05**	<0.01	0.08	0.08	-	**0.08**	-	<0.02	-	<0.02	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02
		17 Oct 2023	0021_SW078_231017	ES2336399	<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
		10 Apr 2024	0021_SW078_240410	ES2412012	**0.02**	**0.02**	<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
		23 Oct 2024	0021_SW078		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			0021_SW078_241023	ES2435078	<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
		02 Apr 2025	0021_SW078_250402	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	<0.02	<0.02	<0.02
	0021_SW079	22 Mar 2018	UN2_SW04_180322		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				ES1808818	0.0041	0.0049	0.0006	0.0102	0.0102	-	0.0090	-	<0.0005	-	<0.0005	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	0.0006	<0.0005
		11 Feb 2019	UN2_SW04_190211	ES1904669	**0.057**	**0.0402**	0.001	0.107	0.105	-	**0.0972**	-	<0.0005	-	<0.0005	<0.0005	-	0.0012	<0.002	<0.0005	<0.0005	0.0009	0.0063
		18 Mar 2019	UN2_SW04_190318	ES1908940	**0.0226**	**0.0132**	<0.0020[#2]	0.0358	0.0358	-	**0.0358**	-	<0.0020[#2]	-	<0.0020[#2]	<0.0020[#2]	-	<0.0020[#2]	<0.002	<0.0020[#2]	<0.0020[#2]	<0.0020[#2]	<0.0020[#2]
		11 Oct 2022	0021_SW079_221012	ES2237759	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		12 Oct 2022	0021_QC202_221012	308187	**0.05**	**0.04**	<0.01	0.08	-	0.05	**0.08**	-	<0.01	-	<0.02	<0.01	-	<0.01	<0.02	<0.02	<0.05	<0.01	<0.01
			0021_SW079_221012	ES2237106	**0.05**	**0.05**	<0.01	0.10	0.10	-	**0.10**	-	<0.02	-	<0.02	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02
		19 Apr 2023	0021_QC103_230419	ES2313364	**0.06**	**0.08**	<0.01	0.14	0.14	-	**0.14**	-	<0.02	-	<0.02	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02
			0021_QC203_230419	321517	**0.08**	**0.1**	<0.01	0.18	-	0.08	**0.18**	-	<0.01	-	<0.02	<0.01	-	<0.01	<0.02	<0.02	<0.05	<0.01	<0.01
			0021_SW079_230419	ES2313355	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				ES2313356	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				ES2313364	**0.06**	**0.06**	<0.01	0.12	0.12	-	**0.12**	-	<0.02	-	<0.02	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02
		17 Oct 2023	0021_SW079_231017	ES2336399	**0.07**	**0.04**	<0.01	0.11	0.11	-	**0.11**	-	<0.02	-	<0.02	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02
		10 Apr 2024	0021_SW079_240410	ES2412012	**0.05**	**0.06**	<0.01	0.11	0.11	-	**0.11**	-	<0.02	-	<0.02	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02
		23 Oct 2024	0021_SW079		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			0021_SW079_241023	ES2435078	**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	<0.02
		02 Apr 2025	0021_SW079_250402	ES2510623	**0.04**	**0.02**	<0.01	0.06	0.06	-	**0.06**	-	<0.02	-	<0.02	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02
	0021_SW080	22 Mar 2018	UN2_SW05_180322		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				ES1808818	**0.0546**	**0.0466**	0.0010	0.110	0.109	-	**0.101**	-	0.0015	-	<0.0005	<0.0005	-	0.0015	<0.002	<0.0005	<0.0005	0.0008	0.0043
		11 Feb 2019	UN2_SW05_190211	ES1904669	**0.0247**	**0.0223**	0.0006	0.0512	0.0512	-	**0.047**	-	<0.0005	-	<0.0005	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	0.0036
		18 Mar 2019	UN2_SW05_190318	ES1908940	0.0038	0.0030	<0.0005	0.0068	0.0068	-	0.0068	-	<0.0005	-	<0.0005	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		11 Oct 2022	0021_SW080_221012	ES2237759	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		12 Oct 2022	0021_SW080_221012	ES2237106	**0.03**	**0.02**	<0.01	0.05	0.05	-	**0.05**	-	<0.02	-	<0.02	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02
		19 Apr 2023	0021_SW080_230419	ES2313355	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				ES2313356	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				ES2313364	<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
		17 Oct 2023	0021_QC108_231017	ES2336399	**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
			0021_QC208_231017	335876	**0.02**	**0.02**	<0.01	0.05	-	0.02	**0.05**	-	<0.01	-	<0.02	<0.01	-	<0.01	<0.02	<0.02	<0.05	<0.01	<0.01
			0021_SW080_231017	ES2336399	**0.04**	**0.01**	<0.01	0.05	0.05	-	**0.05**	-	<0.02	-	<0.02	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02
		10 Apr 2024	0021_QC109_240410	ES2412012	<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
			0021_QC209_240410	348825	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	-	<0.01	-	<0.02	<0.01	-	<0.01	<0.02	<0.02	<0.05	<0.01	<0.01
			0021_SW080_240410	ES2412012	<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
		23 Oct 2024	0021_SW080		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			0021_SW080_241023	ES2435078	**0.02**	**0.01**	<0.01	0.03	0.03	-	**0.03**	-	<0.02	-	<0.02	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02
		02 Apr 2025	0021_SW080_250402	ES2510623	**0.02**	**0.01**	<0.01	0.03	0.03	-	**0.03**	-	<0.02	-	<0.02	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids						PFAS - Perfluoroalk				
	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)	Perfluorononane sulfonate (PFNS)	Perfluorodecanesulfonic acid (PFDS)	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	µg/L	µg/L
EQL	0.0001	0.0005	0.0005	0.0003	0.0003	0.001	0.0003	0.001	0.0005	0.01	0.0005	0.0005	0.01	0.0005	0.002	0.0005	0.0005	0.0005	0.0005
0020_0021_Human health consumption of biota	**0.01**	**0.01**					**0.01**												
PFAS NEMP 2025 Freshwater and Interim Marine 95%	0.13		220																
PFAS NEMP 2025 Recreational water quality	2	2	10				2												
Statistics																			
Number of Results	67	67	67	67	61	8	67	2	67	1	67	67	1	67	67	67	67	67	67
Number of Detects	41	40	4	39	36	3	40	0	1	0	0	0	0	2	0	0	0	3	6
Minimum Concentration	0.0016	0.0006	<0.0005	<0.002	<0.002	<0.01	<0.002	<0.01	<0.0005	<0.01	<0.0005	<0.0005	<0.01	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	0.0005
Minimum Detect	0.0016	0.0006	0.0006	0.0022	0.0022	0.02	0.0022	ND	0.0015	ND	ND	ND	ND	0.0012	ND	ND	ND	0.0006	0.0005
Maximum Concentration	0.08	0.1	<0.01	0.18	0.14	0.08	0.18	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01	<0.02	<0.1	<0.02	<0.05	<0.02	<0.02
Maximum Detect	0.08	0.1	0.001	0.18	0.14	0.08	0.18	ND	0.0015	ND	ND	ND	ND	0.0015	ND	ND	ND	0.0009	0.0063
Average Concentration *	0.016	0.015	0.0033	0.031	0.028	0.022	0.029	0.005	0.0059		0.0064	0.0059		0.0059	0.028	0.0064	0.0077	0.0059	0.0061
Geometric Average *	0.0086	0.007	0.002	0.014	0.013	0.011	0.012	0.005	0.0028	0.005	0.0029	0.0027	0.005	0.0029	0.011	0.0029	0.0031	0.0029	0.0033
Median Concentration *	0.005	0.005	0.005	0.0073	0.0073	0.005	0.0064	0.005	0.01	0.005	0.01	0.01	0.005	0.01	0.05	0.01	0.01	0.01	0.01
Standard Deviation *	0.02	0.02	0.0022	0.04	0.036	0.028	0.04	0	0.0045		0.0046	0.0045		0.0045	0.024	0.0046	0.0071	0.0045	0.0043
Geometric Standard Deviation *	3.1	3.4	3.4	3.8	3.6	3.2	3.7	1	4.8		5.1	5		4.7	6	5.1	5.6	4.7	4.3
95% UCL (Student's-t) *	0.0206	0.0186	0.00378	0.0394	0.0358	0.0408	0.0373	0.005	0.00684		0.0073	0.00683		0.00685	0.0327	0.0073	0.00914	0.00685	0.00702
Number of Env Standard Exceedances	22	20	0	0	0	0	28	0	0	0	0	0	0	0	0	0	0	0	0
Number of Env Standard Exceedances (Detects Only)	22	20	0	0	0	0	28	0	0	0	0	0	0	0	0	0	0	0	0
% of Detects	61	60	6	58	59	38	60	0	1	0	0	0	0	3	0	0	0	4	9
% of Non-Detects	39	40	94	42	41	62	40	100	99	100	100	100	100	97	100	100	100	96	91
% of Detects at or above Env Standards	33	30	0	0	0	0	42	0	0	0	0	0	0	0	0	0	0	0	0
% of Results Below Env Standards or Non-Detect	67	70	100	100	100	100	58	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

Environmental Standards

HEPA, March 2025, PFAS NEMP 2025 Freshwater and Interim Marine 95%
HEPA, March 2025, PFAS NEMP 2025 Recreational water quality
JBRF/HMAS Creswell OMP Site Specific Criteria

					yl Carboxylic Acids					PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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					0.0005	0.0005	0.0005	0.0005	0.0005	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 2025 Freshwater and Interim Marine 95%																				
PFAS NEMP 2025 Recreational water quality																				
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																
Receptor	0021_MW020	01 May 2017	MW020		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				ES1710866	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
		14 Feb 2019	0021_MW020_190214	ES1905115	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	0.008	<0.001
			0021_QC210_190214	641508	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	0.009	<0.001
		29 May 2019	0021_MW020_190529		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				ES1916831	<0.0005	<0.0005	<0.0005	<0.0005	0.0007	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
			0021_QC200_190529	660059	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.005	<0.001
		23 Oct 2024	0021_MW020		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			0021_MW020_241023	ES2435078	<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
		02 Apr 2025	0021_MW020_250402	ES2510113	<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
	0021_SW076	22 Mar 2018	UN2_QC102_180322	ES1808818	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
			UN2_SW01_180322		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				ES1808818	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
		11 Feb 2019	UN2_QC202_190211	640876	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.005	<0.001
			UN2_SW01_190211	ES1904669	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
		18 Mar 2019	UN2_SW01_190318	ES1908940	<0.0020#2	<0.0020#2	<0.0050#2	<0.0020#2	<0.0020#2	<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
		12 Oct 2022	0021_SW076_221012	ES2237106	<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
		19 Apr 2023	0021_SW076_230419	ES2313355	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				ES2313356	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				ES2313364	<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
		18 Oct 2023	0021_SW076_231018	ES2336399	<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
		10 Apr 2024	0021_QC105_240410	ES2412012	<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
			0021_QC205_240410	348825	<0.01	<0.02	<0.5	<0.1	<0.02	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
			0021_SW076_240410	ES2412012	<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
		23 Oct 2024	0021_QC254_241023	1154751	<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	<0.01	<0.05	<0.01
			0021_SW076_241023	ES2435078	<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
		02 Apr 2025	0021_SW076_250402	ES2510623	<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
	0021_SW077	22 Mar 2018	UN2_QC202_180322	591340	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.005	<0.001
			UN2_SW02_180322		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				ES1808818	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
		11 Feb 2019	UN2_SW02_190211	ES1904669	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
		18 Mar 2019	UN2_QC105_190318	ES1908940	<0.0020#2	<0.0020#2	<0.0050#2	<0.0020#2	<0.0020#2	<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
			UN2_SW02_190318	ES1908940	<0.0020#2	<0.0020#2	<0.0050#2	<0.0020#2	<0.0020#2	<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
		11 Oct 2022	0021_SW077_221012	ES2237759	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		12 Oct 2022	0021_SW077_221012	ES2237106	<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
		19 Apr 2023	0021_QC105_230419	ES2313364	<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
			0021_QC205_230419	321517	<0.01	<0.02	<0.5	<0.1	<0.02	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
			0021_SW077_230419	ES2313355	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				ES2313356	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				ES2313364	<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
		18 Oct 2023	0021_SW077_231018	ES2336399	<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
		10 Apr 2024	0021_SW077_240410	ES2412012	<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

					tyl Carboxylic Acids					PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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					0.0005	0.0005	0.0005	0.0005	0.0005	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 2025 Freshwater and Interim Marine 95%																				
PFAS NEMP 2025 Recreational water quality																				
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																
Receptor	0021_SW078	22 Mar 2018	UN2_SW03_180322		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				ES1808818	<0.0005	0.0034	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
		11 Feb 2019	UN2_QC102_190211	ES1904669	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
			UN2_SW03_190211	ES1904669	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
		18 Mar 2019	UN2_SW03_190318	ES1908940	<0.0020[#2]	<0.0020[#2]	<0.0050[#2]	<0.0020[#2]	<0.0020[#2]	<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]
		12 Oct 2022	0021_SW078_221012	ES2237106	<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
				ES2237759	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		19 Apr 2023	0021_SW078_230419	ES2313355	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				ES2313356	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				ES2313364	<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
		17 Oct 2023	0021_SW078_231017	ES2336399	<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
		10 Apr 2024	0021_SW078_240410	ES2412012	<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
		23 Oct 2024	0021_SW078		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			0021_SW078_241023	ES2435078	<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
		02 Apr 2025	0021_SW078_250402	ES2510623	<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
	0021_SW079	22 Mar 2018	UN2_SW04_180322		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				ES1808818	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
		11 Feb 2019	UN2_SW04_190211	ES1904669	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
		18 Mar 2019	UN2_SW04_190318	ES1908940	<0.0020[#2]	<0.0020[#2]	<0.0050[#2]	<0.0020[#2]	<0.0020[#2]	<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]
		11 Oct 2022	0021_SW079_221012	ES2237759	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		12 Oct 2022	0021_QC202_221012	308187	<0.01	<0.02	<0.5	<0.1	<0.02	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
			0021_SW079_221012	ES2237106	<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
		19 Apr 2023	0021_QC103_230419	ES2313364	<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
			0021_QC203_230419	321517	<0.01	<0.02	<0.5	<0.1	<0.02	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
			0021_SW079_230419	ES2313355	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				ES2313356	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				ES2313364	<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
		17 Oct 2023	0021_SW079_231017	ES2336399	<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
		10 Apr 2024	0021_SW079_240410	ES2412012	<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
		23 Oct 2024	0021_SW079		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			0021_SW079_241023	ES2435078	<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
		02 Apr 2025	0021_SW079_250402	ES2510623	<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
	0021_SW080	22 Mar 2018	UN2_SW05_180322		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				ES1808818	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
		11 Feb 2019	UN2_SW05_190211	ES1904669	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
		18 Mar 2019	UN2_SW05_190318	ES1908940	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
		11 Oct 2022	0021_SW080_221012	ES2237759	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		12 Oct 2022	0021_SW080_221012	ES2237106	<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
		19 Apr 2023	0021_SW080_230419	ES2313355	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				ES2313356	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				ES2313364	<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
		17 Oct 2023	0021_QC108_231017	ES2336399	<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
			0021_QC208_231017	335876	<0.01	<0.02	<0.5	<0.1	<0.02	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
			0021_SW080_231017	ES2336399	<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
		10 Apr 2024	0021_QC109_240410	ES2412012	<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
			0021_QC209_240410	348825	<0.01	<0.02	<0.5	<0.1	<0.02	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
			0021_SW080_240410	ES2412012	<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
		23 Oct 2024	0021_SW080		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			0021_SW080_241023	ES2435078	<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
		02 Apr 2025	0021_SW080_250402	ES2510623	<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

	tyl Carboxylic Acids					PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
	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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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	0.0005	0.0005	0.0005	0.0005	0.0005	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 2025 Freshwater and Interim Marine 95%																
PFAS NEMP 2025 Recreational water quality																

Statistics

Number of Results	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67
Number of Detects	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2	0
Minimum Concentration	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Minimum Detect	ND	0.0034	ND	ND	0.0007	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.008	ND
Maximum Concentration	<0.02	<0.02	<0.5	<0.1	<0.02	<0.1	<0.05	<0.5	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05
Maximum Detect	ND	0.0034	ND	ND	0.0007	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.009	ND
Average Concentration *	0.0059	0.0064	0.036	0.0099	0.0064	0.018	0.0068	0.036	0.016	0.0068	0.016	0.01	0.014	0.014	0.014	0.014
Geometric Average *	0.0027	0.003	0.0067	0.0033	0.0029	0.0077	0.0033	0.0089	0.0072	0.0033	0.0072	0.0038	0.0055	0.0052	0.0062	0.0055
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 *	0.0045	0.0046	0.069	0.013	0.0046	0.015	0.005	0.068	0.012	0.005	0.012	0.013	0.012	0.012	0.012	0.012
Geometric Standard Deviation *	5	5	9.8	6.1	5.1	5.8	4.9	7.1	5.4	4.9	5.4	5.8	6	5.9	5.3	6
95% UCL (Student's-t) *	0.00683	0.00734	0.0498	0.0127	0.00731	0.0214	0.0078	0.0502	0.0185	0.0078	0.0185	0.0131	0.0166	0.0162	0.0168	0.0166
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	1	0	0	1	0	0	0	0	0	0	0	0	0	3	0
% of Non-Detects	100	99	100	100	99	100	100	100	100	100	100	100	100	100	97	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 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

Environmental Standards

HEPA, March 2025, PFAS NEMP 2025 Freshwater and Interim Marine 95%
HEPA, March 2025, PFAS NEMP 2025 Recreational water quality
JBRF/HMAS Creswell OMP Site Specific Criteria

				PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids							Pf			
				Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL				0.0001	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	0.01	0.002	0.0005	0.0005	0.0005
PFAS NEMP 2025 Freshwater and Interim Marine 95%				0.13[#1]		220[#1]																
PFAS NEMP 2025 Recreational water quality				2[#2]	2[#2]	10[#2]	2[#2]															
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																		
Source	0020_MW037	01 May 2017	MW037	ES1710866	0.164	1.53	0.0860	1.69	2.81	2.38	-	-	0.369	<0.0005	-	0.118	-	0.314	-	0.002	<0.0005	<0.0005	0.0224
Source	0020_MW037	18 Oct 2021	0020_MW037_211018	ES2138638	4.09	9.43	0.56	13.5	24.4	22.2	-	-	1.37	<0.02	-	0.79	-	1.37	-	0.6	<0.02	<0.02	0.38
Source	0020_MW037	04 Apr 2022	0020_MW037_220404	ES2212597	0.78	12.2	0.60	13.0	19.0	17.5	-	-	0.69	<0.02	-	0.52	-	0.94	-	0.2	<0.02	<0.02	0.21
Source	0020_MW037	10 Oct 2022	0020_MW037_221010	ES2237104	4.81	10.6	0.80	15.4	28.7	26.4	-	-	1.51	<0.02	-	0.69	-	1.48	-	0.6	<0.02	<0.02	0.47
Source	0020_MW037	17 Apr 2023	0020_MW037_230417	ES2313254	1.36	11.8	0.64	13.2	23.0	21.2	-	-	0.98	<0.02	-	0.45	-	1.40	-	0.6	<0.02	<0.02	0.37
Source	0020_MW037	16 Oct 2023	0020_MW037_ 231016	ES2336397	2.72	9.83	0.73	12.6	25.8	23.9	-	-	1.07	<0.02	-	0.56	-	1.38	-	0.6	<0.02	<0.02	0.45
Source	0020_MW037	16 Oct 2023	0020_SW037_ 231016	ES2336397	0.16	0.09	<0.01	0.25	0.28	0.28	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Source	0020_MW037	08 Apr 2024	0020_MW037_240408	ES2411964	3.00	7.17	0.87	10.2	28.6	25.3	-	-	1.35	<0.02	-	0.93	-	1.80	-	0.8	<0.02	<0.02	0.66
Source	0020_MW037	22 Oct 2024	0020_MW037_241022	ES2435143	3.86	8.73	0.87	12.6	34.5	31.4	-	-	1.46	<0.02	-	0.65	-	1.77	-	0.7	<0.02	<0.02	0.71
Source	0020_MW037	31 Mar 2025	0020_MW037_250331	ES2510618	2.51	5.16	0.44	7.67	18.1	16.6	-	-	0.90	<0.02	-	0.35	-	0.73	-	0.4	<0.02	<0.02	0.32
Source	0020_MW037	31 Mar 2025	0020_QC131_250331	ES2510618	2.24	5.67	0.45	7.91	18.4	16.8	-	-	0.86	<0.02	-	0.39	-	0.84	-	0.4	<0.02	<0.02	0.31
Source	0020_MW037	31 Mar 2025	0020_QC231_250331	1209674	2.2	5.9	0.50	8.1	19.02	17.51	2.7	8.6	0.94	<0.01	<0.01	0.39	0.35	0.77	-	0.47	<0.01	<0.01	0.30
Source	0020_MW112	01 May 2017	F_MW02	ES1710866	0.0031	0.243	0.0033	0.246	0.352	0.304	-	-	0.0442	<0.0005	-	0.0030	-	0.0449	-	<0.002	<0.0005	<0.0005	0.0022
Source	0020_MW112	18 Oct 2021	0020_MW112_211018	ES2138638	0.06	0.59	0.06	0.65	0.99	0.92	-	-	0.09	<0.02	-	<0.02	-	0.07	-	<0.1	<0.02	<0.02	0.02
Source	0020_MW112	04 Apr 2022	0020_MW112_220404	ES2212597	0.16	0.80	0.09	0.96	1.68	1.55	-	-	0.15	<0.02	-	0.02	-	0.11	-	<0.1	<0.02	<0.02	0.05
Source	0020_MW112	10 Oct 2022	0020_MW112_221010	ES2237104	0.15	0.57	0.07	0.72	1.22	1.15	-	-	0.08	<0.02	-	<0.02	-	0.07	-	<0.1	<0.02	<0.02	0.04
Source	0020_MW112	17 Apr 2023	0020_MW112_230417	ES2313254	0.26	1.30	0.15	1.56	2.85	2.61	-	-	0.18	<0.02	-	0.03	-	0.21	-	0.1	<0.02	<0.02	0.09
Source	0020_MW112	16 Oct 2023	0020_MW112_ 231016	ES2336397	0.06	1.10	0.08	1.16	2.16	1.97	-	-	0.19	<0.02	-	<0.02	-	0.19	-	<0.1	<0.02	<0.02	0.07
Source	0020_MW112	08 Apr 2024	0020_MW112_240408	ES2411964	0.19	0.74	0.07	0.93	1.48	1.35	-	-	0.13	<0.02	-	<0.02	-	0.10	-	<0.1	<0.02	<0.02	0.04
Source	0020_MW112	21 Oct 2024	0020_MW112_241021	ES2435143	0.06	0.84	0.08	0.90	1.80	1.65	-	-	0.12	<0.02	-	<0.02	-	0.12	-	<0.1	<0.02	<0.02	0.08
Source	0020_MW112	21 Oct 2024	0020_QC251_241021	1154740	0.05	1.1	0.07	1.15	2.09	1.9	0.12	1.22	0.15	<0.01	<0.01	0.01	0.04	0.14	-	0.09	<0.01	<0.01	0.06
Source	0020_MW112	31 Mar 2025	0020_MW112_250331	ES2510618	0.14	0.47	0.05	0.61	0.95	0.90	-	-	0.06	<0.02	-	<0.02	-	0.05	-	<0.1	<0.02	<0.02	0.04
Source	0020_MW112	31 Mar 2025	0020_QC130_250331	ES2510618	0.07	0.41	0.04	0.48	0.77	0.73	-	-	0.05	<0.02	-	<0.02	-	0.04	-	<0.1	<0.02	<0.02	0.03
Source	0020_MW112	31 Mar 2025	0020_QC230_250331	1209674	0.08	0.46	0.06	0.54	0.9	0.85	0.14	0.6	0.05	<0.01	<0.01	<0.01	0.01	0.04	-	<0.05	<0.01	<0.01	0.03
Source	0020_MW115	11 Aug 2020	0020_MW115_200811	ES2028287	1.93	13.5	0.19	15.4	18.7	17.5	-	-	0.45	<0.02	-	0.14	-	1.01	-	0.2	<0.02	<0.02	0.18
Source	0020_MW115	19 Oct 2021	0020_MW115_211019	ES2138638	9.29	13.9	0.19	23.2	26.2	25.2	-	-	0.29	<0.02	-	0.38	-	0.66	-	0.1	<0.02	<0.02	0.24
Source	0020_MW115	04 Apr 2022	0020_MW115_220404	ES2212597	23.3	11.8	0.35	35.1	38.3	37.3	-	-	0.30	<0.02	-	0.50	-	0.49	-	0.1	<0.02	<0.02	0.18
Source	0020_MW115	10 Oct 2022	0020_MW115_221010	ES2237104	33.9	13.2	0.38	47.1	50.3	49.2	-	-	0.28	<0.02	-	0.47	-	0.59	-	0.1	<0.02	<0.02	0.20
Source	0020_MW115	17 Apr 2023	0020_MW115_230417	ES2313254	9.42	0.94	0.07	10.4	10.7	10.6	-	-	0.03	<0.02	-	0.05	-	0.05	-	<0.1	<0.02	<0.02	0.03
Source	0020_MW115	16 Oct 2023	0020_MW115_ 231016	ES2336397	18.2	2.18	0.08	20.4	21.2	20.9	-	-	0.07	<0.02	-	0.10	-	0.11	-	<0.1	<0.02	<0.02	0.06
Source	0020_MW115	08 Apr 2024	0020_MW115_240408	ES2411964	3.26	0.08	<0.01	3.34	3.34	3.34	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Source	0020_MW115	22 Oct 2024	0020_MW115_241022	ES2435143	14.0	3.65	0.14	17.6	18.7	18.4	-	-	0.05	<0.02	-	0.21	-	0.11	-	<0.1	<0.02	<0.02	0.08
Source	0020_MW115	31 Mar 2025	0020_MW115_250331	ES2510618	0.93	0.11	<0.01	1.04	1.04	1.04	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Source	0020_SW016	26 Oct 2017	E_Irrigation_03	ES1726858	0.155	0.0363	0.0099	0.191	0.242	0.234	-	-	0.0030	<0.0005	-	0.0044	-	0.0044	-	<0.002	<0.0005	<0.0005	0.0050
Source	0020_SW016	26 Oct 2017	TNQA301	569797	0.18[#3]	0.068[#3]	0.007	0.248	0.321	0.308	-	-	0.006	<0.001	-	0.004	-	0.009	-	<0.005	<0.001	<0.001	0.006
Source	0020_SW016	18 Oct 2021	0020_SW016_211018	ES2138638	0.59	0.35	0.02	0.94	1.10	1.07	-	-	0.04	<0.02	-	<0.02	-	0.03	-	<0.1	<0.02	<0.02	<0.02
Source	0020_SW016	08 Apr 2022	0020_SW016_220408	ES2212597	0.73	0.34	0.02	1.07	1.24	1.20	-	-	0.02	<0.02	-	0.02	-	0.02	-	<0.1	<0.02	<0.02	<0.02
Source	0020_SW016	11 Oct 2022	0020_SW016_221011	ES2237104	0.58	0.35	0.04	0.93	1.09	1.07	-	-	0.04	<0.02	-	<0.02	-	0.02	-	<0.1	<0.02	<0.02	<0.02
Source	0020_SW016	17 Apr 2023	0020_SW016_230417	ES2313254	0.55	0.39	0.02	0.94	1.10	1.07	-	-	0.04	<0.02	-	<0.02	-	0.03	-	<0.1	<0.02	<0.02	<0.02
Source	0020_SW016	16 Oct 2023	0020_SW016_ 231016	ES2336397	0.18	0.09	<0.01	0.27	0.30	0.30	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Source	0020_SW016	08 Apr 2024	0020_SW016_240408	ES2411964	0.82	0.30	0.01	1.12	1.30	1.26	-	-	0.08	<0.02	-	0.02	-	0.02	-	<0.1	<0.02	<0.02	<0.02
Source	0020_SW016	21 Oct 2024	0020_SW016_241021	ES2435143	0.41	0.19	0.02	0.60	0.65	0.65	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Source	0020_SW016	31 Mar 2025	0020_SW016_250331	ES2510618	0.60	0.15	<0.01	0.75	0.78	0.78	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Source	0020_SW018	10 Apr 2017	E_SW01	ES1708884	0.390	0.326	0.0328	0.716	0.997	0.911	-	-	0.0645	<0.0005	-	0.0316	-	0.0493	-	<0.002	0.0016	<0.0005	0.0141
Source	0020_SW018	18 Oct 2021	0020_SW018_211018	ES2138638	0.45	0.32	0.02	0.77	0.91	0.88	-	-	0.03	<0.02	-	<0.02	-	0.03	-	<0.1	<0.02	<0.02	<0.02
Source	0020_SW018	08 Apr 2022	0020_SW018_220408	ES2212597	0.38	0.31	0.05	0.69	0.87	0.87	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	0.02
Source	0020_SW018	11 Oct 2022	0020_QC204_221011	308190	0.45	0.33	0.03	0.78	0.93	-	0.47	-	0.02	<0.02	-	0.02	-	0.03	-	<0.02	<0.02	<0.05	0.01
Source	0020_SW018	11 Oct 2022	0020_SW018_221011	ES2237104	0.50	0.33	0.03	0.83	1.02	1.02	-	-	0.07	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Source	0020_SW018	17 Apr 2023	0020_SW018_230417	ES2313254	0.52	0.35	0.02	0.87	1.03	0.98	-	-	0.03	<0.02	-	0.02	-	0.03	-	<0.1	<0.02	<0.02	<0.02
Source	0020_SW018	16 Oct 2023	0020_SW018_ 231016	ES2336397	0.60	0.23	0.01	0.83	0.89	0.89	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Source	0020_SW018	08 Apr 2024	0020_SW018_240408	ES2411964	0.46	0.24	0.01	0.70	0.80	0.80	-	-	0.04	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Source	0020_SW018	21 Oct 2024	0020_QC152_241021	ES2435143	0.35	0.20	0.02	0.55	0.60	0.60	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Source	0020_SW018	21 Oct 2024	0020_SW018_241021	ES2435143	0.37	0.19	0.02	0.56	0.61	0.61	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Source	0020_SW018	31 Mar 2025	0020_QC150_250331	ES2510618	0.34	0.16	0.01	0.50	0.54	0.54	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Source	0020_SW018	31 Mar 2025	0020_SW018_250331	ES2510618	0.27	0.15	<0.01	0.42	0.45	0.45	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Source	0021_MW025	27 Apr 2017	JCQA09	ES1710200	0.0019	0.0060	<0.0005	0.0079	0.0079	0.0079	-	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	-	<0.002	<0.0005	<0.0005	<0.0005
Source	0021_MW025	27 Apr 2017	MW025	ES1710200	0.0022	0.0061	<0.0005	0.0083	0.0083	0.0083	-	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	-	<0.002	<0.0005	<0.0005	<0.0005
Source	0021_MW025	14 Feb 2019	0021_MW025_190214	ES1905115	0.0011	0.0025	<0.0005	0.0036	0.0066	0.0066	-	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	-	<0.002	<0.0005	<0.0005	<0.0005
Source	0021_MW025	14 Feb 2019	0021_QC209_190214	641508	0.0012[#3]	0.003[#3]	<0.001	0.0042	<0.005	<0.005	-	-	<0.001	<0.001	-	<0.001	-	<0.001	-	<0.005	<0.001	<0.001	<0.001
Source	0021_MW025	29 May 2019	0021_MW025_190529	ES1916831	0.0005	0.0024	<0.0005	0.0029	0.0029	0.0029	-	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	-	<0.002	<0.0005	<0.0005	<0.0005
Source	0021_MW025	20 Oct 2021	0021_MW025_211020	ES2138639	0.01	0.02	<0.01	0.03	0.03	0.03	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Source	0021_MW025	06 Apr 2022	0021_MW025_220406	ES2212442	<0.01	0.02	<0.01	0.02	0.02	0.02	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Source	0021_MW025	14 Oct 2022	0021_MW025_221014	ES2237106	0.01	0.01	<0.01	0.02	0.02	0.02	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids							Pf			
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL					0.0001	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	0.01	0.002	0.0005	0.0005	0.0005
PFAS NEMP 2025 Freshwater and Interim Marine 95%					0.13[#1]		220[#1]																
PFAS NEMP 2025 Recreational water quality					2[#2]	2[#2]	10[#2]	2[#2]															
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																			
Source	0021_MW025	21 Apr 2023	0021_MW025_230421	ES2313364	<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
Source	0021_MW025	19 Oct 2023	0021_MW025_231019	ES2336398	<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
Source	0021_MW025	12 Apr 2024	0021_MW025_240412	ES2411994	<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
Source	0021_MW025	22 Oct 2024	0021_MW025_241022	ES2435078	<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
Source	0021_MW025	02 Apr 2025	0021_MW025_250402	ES2510113	<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
Source	0021_MW026	28 Apr 2017	MW026	ES1710200	0.0010	0.0074	<0.0005	0.0084	0.0112	0.0102	-	-	0.0013	<0.0005	-	<0.0005	-	0.0010	-	<0.002	<0.0005	<0.0005	<0.0005
Source	0021_MW026	14 Feb 2019	0021_MW026_190214	ES1905115	0.0100	0.0061	<0.0005	0.0161	0.0404	0.0382	-	-	0.0020	<0.0005	-	<0.0005	-	0.0022	-	<0.002	<0.0005	<0.0005	<0.0005
Source	0021_MW026	14 Feb 2019	0021_QC110_190214	ES1905115	0.0108	0.0056	<0.0005	0.0164	0.0362	0.0347	-	-	0.0012	<0.0005	-	<0.0005	-	0.0015	-	<0.002	<0.0005	<0.0005	<0.0005
Source	0021_MW026	29 May 2019	0021_MW026_190529	ES1916831	0.0008	0.0042	<0.0005	0.0050	0.0127	0.0106	-	-	0.0009	<0.0005	-	<0.0005	-	0.0021	-	<0.002	<0.0005	<0.0005	<0.0005
Source	0021_MW026	20 Oct 2021	0021_MW026_211020	ES2138639	<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
Source	0021_MW026	06 Apr 2022	0021_MW026_220406	ES2212442	<0.01	0.02	<0.01	0.02	0.02	0.02	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Source	0021_MW026	14 Oct 2022	0021_MW026_221014	ES2237106	<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
Source	0021_MW026	21 Apr 2023	0021_MW026_230421	ES2313364	<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
Source	0021_MW026	19 Oct 2023	0021_MW026_231019	ES2336398	<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
Source	0021_MW026	12 Apr 2024	0021_MW026_240412	ES2411994	<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
Source	0021_MW026	22 Oct 2024	0021_MW026_241022	ES2435078	<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
Source	0021_MW026	22 Oct 2024	0021_QC104_241022	ES2435078	<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
Source	0021_MW026	22 Oct 2024	0021_QC204_241022	1154751	<0.01	<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	-	<0.05	<0.01	<0.01	<0.01
Source	0021_MW026	07 Apr 2025	0021_MW026_250407	ES2510113	<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
Source	0021_MW117	03 May 2017	C_MW01	ES1710866	0.0389	0.106	0.0046	0.145	0.220	0.201	-	-	0.0123	<0.0005	-	0.0034	-	0.0151	-	<0.002	<0.0005	<0.0005	0.0026
Source	0021_MW117	20 Oct 2021	0021_MW117_211020	ES2138639	0.16	0.33	<0.01	0.49	0.60	0.54	-	-	0.05	<0.02	-	<0.02	-	0.06	-	<0.1	<0.02	<0.02	<0.02
Source	0021_MW117	20 Oct 2021	0021_QC203_211020	281322	0.12	0.32	<0.01	0.45	0.57	-	0.12	-	0.07	<0.02	-	<0.01	-	0.06	-	<0.02	<0.02	<0.05	<0.01
Source	0021_MW117	14 Oct 2022	0021_MW117_221014	ES2237106	0.07	0.24	<0.01	0.31	0.34	0.31	-	-	<0.02	<0.02	-	<0.02	-	0.03	-	<0.1	<0.02	<0.02	<0.02
Source	0021_MW117	21 Apr 2023	0021_MW117_230421	ES2313364	0.10	0.28	<0.01	0.38	0.44	0.40	-	-	0.02	<0.02	-	<0.02	-	0.04	-	<0.1	<0.02	<0.02	<0.02
Source	0021_MW117	19 Oct 2023	0021_MW117_231019	ES2336398	0.14	0.26	<0.01	0.40	0.46	0.44	-	-	<0.02	<0.02	-	<0.02	-	0.02	-	<0.1	<0.02	<0.02	<0.02
Source	0021_MW117	12 Apr 2024	0021_MW117_240412	ES2411994	0.06	0.17	<0.01	0.23	0.23	0.23	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Source	0021_MW117	22 Oct 2024	0021_MW117_241022	ES2435078	0.04	0.12	<0.01	0.16	0.18	0.16	-	-	<0.02	<0.02	-	<0.02	-	0.02	-	<0.1	<0.02	<0.02	<0.02
Source	0021_MW117	02 Apr 2025	0021_MW117_250402	ES2510113	0.04	0.17	<0.01	0.21	0.23	0.21	-	-	<0.02	<0.02	-	<0.02	-	0.02	-	<0.1	<0.02	<0.02	<0.02
Source	0021_MW118	03 May 2017	C_MW02	ES1710866	0.0139	0.0306	0.0009	0.0445	0.0589	0.0531	-	-	0.0040	<0.0005	-	<0.0005	-	0.0058	-	<0.002	<0.0005	<0.0005	<0.0005
Source	0021_MW118	26 Oct 2021	0021_MW118_211026	ES2138639	0.87	1.35	0.02	2.22	2.58	2.42	-	-	0.06	<0.02	-	0.03	-	0.13	-	<0.1	<0.02	<0.02	<0.02
Source	0021_MW118	11 Oct 2022	0021_MW118_221011	ES2237106	0.80	1.14	0.01	1.94	2.16	2.07	-	-	0.05	<0.02	-	<0.02	-	0.09	-	<0.1	<0.02	<0.02	<0.02
Source	0021_MW118	03 Feb 2023	0021_MW118_230203	ES2303695	0.94	1.05	0.02	1.99	2.19	2.10	-	-	0.03	<0.02	-	0.02	-	0.07	-	<0.1	<0.02	<0.02	<0.02
Source	0021_MW118	21 Apr 2023	0021_MW118_230421	ES2313364	1.43	1.80	0.03	3.23	3.56	3.39	-	-	0.05	<0.02	-	0.04	-	0.13	-	<0.1	<0.02	<0.02	<0.02
Source	0021_MW118	19 Oct 2023	0021_MW118_231019	ES2336398	0.82	0.50	0.01	1.32	1.40	1.36	-	-	<0.02	<0.02	-	<0.02	-	0.04	-	<0.1	<0.02	<0.02	<0.02
Source	0021_MW118	12 Apr 2024	0021_MW118_240412	ES2411994	0.26	0.45	<0.01	0.71	0.73	0.71	-	-	<0.02	<0.02	-	<0.02	-	0.02	-	<0.1	<0.02	<0.02	<0.02
Source	0021_MW118	22 Oct 2024	0021_MW118_241022	ES2435078	0.42	0.49	<0.01	0.91	1.01	0.96	-	-	0.02	<0.02	-	<0.02	-	0.05	-	<0.1	<0.02	<0.02	<0.02
Source	0021_MW118	02 Apr 2025	0021_MW118_250402	ES2510113	0.64	0.53	<0.01	1.17	1.22	1.19	-	-	0.02	<0.02	-	<0.02	-	0.03	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_MW001	08 May 2017	MW001	ES1711220	0.0526	0.0309	0.0012	0.0835	0.0963	0.0904	-	-	0.0032	<0.0005	-	0.0026	-	0.0033	-	<0.002	<0.0005	<0.0005	<0.0005
Pathway	0020_MW001	12 Apr 2022	0020_MW001_220412	ES2213152	<0.01	0.03	<0.01	0.03	0.03	0.03	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_MW001	10 Oct 2022	0020_MW001_221010	ES2236866	<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
Pathway	0020_MW001	31 Jan 2023	0020_MW001_230131	ES2303447	0.02	0.02	<0.01	0.04	0.04	0.04	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_MW001	31 Jan 2023	0020_QC201_230131	961653	0.01	0.02	<0.01	0.03	<0.1	<0.05	0.01	0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.05	<0.01	<0.01	<0.01
Pathway	0020_MW001	07 Apr 2025	0020_MW001_250407	ES2510618	<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
Pathway	0020_MW007	11 Apr 2018	0020_MW007_180411	ES1810721	0.118	0.136	0.0096	0.254	0.322	0.304	-	-	0.0096	<0.0005	-	0.0055	-	0.0107	-	<0.002	<0.0005	<0.0005	0.0069
Pathway	0020_MW007	15 Oct 2021	0020_MW007_211015	ES2138638	0.08	0.02	<0.01	0.10	0.10	0.10	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_MW007	15 Oct 2021	0020_QC100_211015	ES2138638	0.04	0.02	<0.01	0.06	0.06	0.06	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_MW007	04 Apr 2022	0020_MW007_220404	ES2212597	0.08	0.08	<0.01	0.16	0.16	0.16	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_MW007	10 Oct 2022	0020_MW007_221010	ES2237104	0.31	0.28	0.01	0.59	0.62	0.62	-	-	0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_MW007	31 Jan 2023	0020_MW007_230131	ES2303447	0.20	0.24	<0.01	0.44	0.50	0.47	-	-	0.03	<0.02	-	<0.02	-	0.03	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_MW007	17 Apr 2023	0020_MW007_230417	ES2313254	0.30	0.35	0.01	0.65	0.80	0.72	-	-	0.04	<0.02	-	0.02	-	0.06	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_MW007	16 Oct 2023	0020_MW007_ 231016	ES2336397	0.07	0.12	<0.01	0.19	0.19	0.19	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_MW007	08 Apr 2024	0020_MW007_240408	ES2411964	0.11	0.14	<0.01	0.25	0.28	0.28	-	-	0.03	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_MW007	07 Apr 2025	0020_MW007_250407	ES2510618	0.10	0.14	<0.01	0.24	0.28	0.28	-	-	0.04	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_MW008	12 Apr 2022	0020_MW008_220412	ES2213152	<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
Pathway	0020_MW008	10 Oct 2022	0020_MW008_221010	ES2236866	<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
Pathway	0020_MW017	01 May 2017	MW017	ES1710866	1.04	0.530	0.0328	1.57	1.91	1.74	-	-	0.0488	0.0078	-	0.0878	-	0.0676	-	<0.002	<0.0005	<0.0005	0.0166
Pathway	0020_MW017	15 Oct 2021	0020_MW017_211015	ES2138638	0.72	0.37	0.02	1.09	1.32	1.26	-	-	0.03	<0.02	-	0.03	-	0.03	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_MW017	04 Apr 2022	0020_MW017_220404	ES2212597	0.87	0.41	0.02	1.28	1.49	1.42	-	-	0.03	<0.02	-	0.04	-	0.03	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_MW017	11 Oct 2022	0020_MW017_221011	ES2237104	0.78	0.21	0.03	0.99	1.09	1.09	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	0.02
Pathway	0020_MW017	01 Feb 2023	0020_MW017_230201	ES2303447	0.98	0.42	0.03	1.40	1.69	1.62	-	-	0.02	<0.02	-	0.04	-	0.03	-	<0.1	<0.02	<0.02	0.03
Pathway	0020_MW017	17 Apr 2023	0020_MW017_230417	ES2313254	1.33	0.50	0.04	1.83	2.16	2.08	-	-	0.02	<0.02	-	0.04	-	0.04	-	<0.1	<0.02	<0.02	0.04
Pathway	0020_MW017	17 Apr 2023	0020_QC104_230417	ES2313254	1.12	0.41	0.03	1.53	1.78	1.72	-	-	0.02	<0.02	-	0.04	-	0.02	-	<0.1	<0.02	<0.02	0.03
Pathway	0020_MW017	17 Apr 2023	0020_QC204_230417	321518	0.94	0.41	0.03	1.4	1.6	-	0.97	-	0.02	<0.02	-	0.03	-	0.03	-	<0.02	<0.02	<0.05	0.02
Pathway	0020_MW017	16 Oct 2023	0020_MW017_ 231016	ES2336397	0.64	0.22	0.02	0.86	0.99	0.99	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	0.02

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids							Pf			
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL					0.0001	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	0.01	0.002	0.0005	0.0005	0.0005
PFAS NEMP 2025 Freshwater and Interim Marine 95%					0.13[#1]		220[#1]																
PFAS NEMP 2025 Recreational water quality					2[#2]	2[#2]	10[#2]	2[#2]															
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																			
Pathway	0020_MW017	08 Apr 2024	0020_MW017_240408	ES2411964	1.03	0.32	0.02	1.35	1.49	1.44	-	-	<0.02	<0.02	-	0.03	-	0.02	-	<0.1	<0.02	<0.02	0.02
Pathway	0020_MW017	21 Oct 2024	0020_MW017_241021	ES2435143	0.79	0.69	0.05	1.48	1.73	1.66	-	-	<0.02	<0.02	-	0.05	-	0.02	-	<0.1	<0.02	<0.02	0.03
Pathway	0020_MW017	31 Mar 2025	0020_MW017_250331	ES2510618	0.98	0.27	0.01	1.25	1.31	1.29	-	-	<0.02	<0.02	-	0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_MW068	10 Oct 2022	0020_MW068_221010	ES2236866	<0.01	0.19	<0.01	0.19	0.19	0.19	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_MW068	31 Jan 2023	0020_MW068_230131	ES2303447	<0.01	0.10	<0.01	0.10	0.17	0.17	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_MW068	21 Oct 2024	0020_MW068_241021	ES2435143	<0.01	0.08	<0.01	0.08	0.08	0.08	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_MW068	01 Apr 2025	0020_MW068_250401	ES2510618	<0.01	0.14	<0.01	0.14	0.14	0.14	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_MW069	24 Apr 2025	0020_MW069_250424	ES2512752	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
Pathway	0020_MW070	24 Apr 2025	0020_MW070_250424	ES2512752	0.50	0.15	<0.01	0.65	0.65	0.65	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_MW070	24 Apr 2025	0020_QC120_250424	ES2512752	0.49	0.13	<0.01	0.62	0.62	0.62	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_MW108	01 May 2017	E_MW03	ES1710866	0.0747	0.161	0.0033	0.236	0.294	0.266	-	-	0.0131	<0.0005	-	0.0132	-	0.0151	-	<0.002	<0.0005	<0.0005	0.0011
Pathway	0020_MW108	13 Apr 2022	0020_MW108_220413	ES2213152	1.02	0.64	0.06	1.66	3.03	2.92	-	-	0.04	<0.02	-	0.07	-	0.04	-	0.2	<0.02	<0.02	0.06
Pathway	0020_MW108	10 Oct 2022	0020_MW108_221010	ES2236866	0.93	0.57	0.03	1.50	1.79	1.76	-	-	0.03	<0.02	-	<0.02	-	0.03	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_MW108	10 Oct 2022	0020_QC100_221010	ES2236866	0.82	0.52	0.03	1.34	1.60	1.57	-	-	0.02	<0.02	-	<0.02	-	0.03	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_MW108	10 Oct 2022	0020_QC200_221010	931497	0.87[#3]	0.53[#3]	0.03[#3]	1.4	1.7	1.64	0.9	1.43	0.02	<0.01	-	0.03	<0.01	0.03[#3]	<0.01	<0.05	<0.01	<0.01	0.02[#3]
Pathway	0020_MW108	31 Jan 2023	0020_MW108_230131	ES2303447	1.24	0.36	0.04	1.60	1.87	1.83	-	-	0.02	<0.02	-	0.02	-	0.02	-	<0.1	<0.02	<0.02	0.02
Pathway	0020_MW109	01 May 2017	E_MW04	ES1710866	0.228	0.146	0.0057	0.374	0.449	0.413	-	-	0.0087	<0.0005	-	0.0231	-	0.0121	-	<0.002	<0.0005	<0.0005	0.0021
Pathway	0020_MW109	03 May 2018	E_MW04_180503	ES1812871	4.46	1.30	0.06	5.76	6.23	6.09	-	-	0.04	<0.02	-	0.06	-	0.08	-	<0.1	<0.02	<0.02	0.02
Pathway	0020_MW109	15 Oct 2021	0020_MW109_211015	ES2138638	0.62	0.48	0.01	1.10	1.45	1.37	-	-	0.03	<0.02	-	0.05	-	0.03	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_MW109	04 Apr 2022	0020_MW109_220404	ES2212597	0.53	0.30	0.02	0.83	1.04	1.01	-	-	0.02	<0.02	-	0.03	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_MW109	04 Apr 2022	0020_QC100_220404	ES2212597	0.51	0.30	0.02	0.81	1.00	0.97	-	-	<0.02	<0.02	-	0.03	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_MW109	04 Apr 2022	0020_QC200_220404	293030	0.62	0.32	0.02	0.95	1.2	-	0.65	-	0.02	<0.02	-	0.03	-	0.02	-	0.03	<0.02	<0.05	0.01
Pathway	0020_MW109	11 Oct 2022	0020_MW109_221011	ES2237104	0.84	0.22	0.03	1.06	1.29	1.27	-	-	<0.02	<0.02	-	0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_MW109	31 Jan 2023	0020_MW109_230131	ES2303447	0.78	0.42	0.03	1.20	1.55	1.48	-	-	<0.02	<0.02	-	0.05	-	0.02	-	<0.1	<0.02	<0.02	0.03
Pathway	0020_MW109	31 Jan 2023	0020_QC101_230131	ES2303447	0.85	0.41	0.04	1.26	1.60	1.55	-	-	<0.02	<0.02	-	0.05	-	<0.02	-	<0.1	<0.02	<0.02	0.03
Pathway	0020_MW109	17 Apr 2023	0020_MW109_230417	ES2313254	1.26	0.70	0.06	1.96	2.43	2.30	-	-	0.02	<0.02	-	0.09	-	0.04	-	<0.1	<0.02	<0.02	0.04
Pathway	0020_MW109	16 Oct 2023	0020_MW109_ 231016	ES2336397	0.69	0.28	0.02	0.97	1.24	1.20	-	-	<0.02	<0.02	-	0.04	-	<0.02	-	<0.1	<0.02	<0.02	0.02
Pathway	0020_MW109	08 Apr 2024	0020_MW109_240408	ES2411964	0.57	0.31	0.01	0.88	1.06	0.99	-	-	0.04	<0.02	-	0.03	-	0.04	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_MW109	08 Apr 2024	0020_QC100_240408	ES2411964	1.21	0.44	0.03	1.65	1.97	1.89	-	-	<0.02	<0.02	-	0.06	-	0.02	-	<0.1	<0.02	<0.02	0.03
Pathway	0020_MW109	08 Apr 2024	0020_QC200_240408	348827	0.89	0.39	0.03	1.3	1.7	-	0.91	-	0.02	<0.02	-	0.06	-	0.03	-	0.05	<0.02	<0.05	0.02
Pathway	0020_MW109	21 Oct 2024	0020_MW109_241021	ES2435143	0.80	0.27	0.03	1.07	1.28	1.25	-	-	<0.02	<0.02	-	0.03	-	<0.02	-	<0.1	<0.02	<0.02	0.02
Pathway	0020_MW109	31 Mar 2025	0020_MW109_250331	ES2510618	1.20	0.39	0.03	1.59	1.87	1.78	-	-	<0.02	<0.02	-	0.07	-	0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_MW110	01 May 2017	E_MW05	ES1710866	0.292	0.860	0.0299	1.15	1.43	1.29	-	-	0.0360	<0.0005	-	0.0782	-	0.0582	-	<0.002	<0.0005	<0.0005	0.0089
Pathway	0020_MW110	15 Oct 2021	0020_MW110_211015	ES2138638	2.23	4.08	0.13	6.31	8.28	7.58	-	-	0.30	<0.02	-	0.18	-	0.52	-	0.1	<0.02	<0.02	0.08
Pathway	0020_MW110	04 Apr 2022	0020_MW110_220404	ES2212597	1.51	4.29	0.13	5.80	8.03	7.48	-	-	0.27	<0.02	-	0.21	-	0.34	-	0.2	<0.02	<0.02	0.07
Pathway	0020_MW110	04 Apr 2022	0020_QC102_220404	ES2212597	1.67	4.40	0.12	6.07	8.26	7.69	-	-	0.26	<0.02	-	0.22	-	0.35	-	0.2	<0.02	<0.02	0.07
Pathway	0020_MW110	04 Apr 2022	0020_QC202_220404	293030	2.1	4.7	0.15	6.8	9.2	-	2.2	-	0.27	<0.02	-	0.22	-	0.38	-	0.28	<0.02	<0.05	0.08
Pathway	0020_MW110	11 Oct 2022	0020_MW110_221011	ES2237104	3.21	1.78	0.17	4.99	6.81	6.51	-	-	0.03	<0.02	-	0.23	-	0.07	-	0.3	<0.02	<0.02	0.11
Pathway	0020_MW110	31 Jan 2023	0020_MW110_230131	ES2303447	4.27	1.53	0.15	5.80	7.56	7.33	-	-	0.03	<0.02	-	0.16	-	0.07	-	0.3	<0.02	<0.02	0.10
Pathway	0020_MW110	17 Apr 2023	0020_MW110_230417	ES2313254	5.20	1.35	0.16	6.55	7.92	7.69	-	-	0.04	<0.02	-	0.16	-	0.07	-	0.2	<0.02	<0.02	0.10
Pathway	0020_MW110	16 Oct 2023	0020_MW110_ 231016	ES2336397	4.56	0.97	0.09	5.53	6.09	5.95	-	-	0.04	<0.02	-	0.09	-	0.05	-	<0.1	<0.02	<0.02	0.05
Pathway	0020_MW110	08 Apr 2024	0020_MW110_240408	ES2411964	4.36	1.63	0.13	5.99	6.78	6.55	-	-	0.06	<0.02	-	0.14	-	0.09	-	<0.1	<0.02	<0.02	0.06
Pathway	0020_MW110	21 Oct 2024	0020_MW110_241021	ES2435143	4.56	0.61	0.06	5.17	5.98	5.89	-	-	0.02	<0.02	-	0.06	-	0.03	-	0.2	<0.02	<0.02	0.04
Pathway	0020_MW110	21 Oct 2024	0020_QC250_241021	1154740	5.9	0.78	0.06	6.68	7.55	7.43	5.96	6.74	0.03	<0.01	0.01	0.08	<0.01	0.03	-	0.18	<0.01	<0.01	0.04
Pathway	0020_MW110	31 Mar 2025	0020_MW110_250331	ES2510618	3.95	1.02	0.07	4.97	5.43	5.27	-	-	0.04	<0.02	-	0.12	-	0.04	-	<0.1	<0.02	<0.02	0.03
Pathway	0020_MW111	01 May 2017	F_MW01	ES1710866	2.36	0.808	0.0863	3.17	4.71	4.53	-	-	0.125	<0.0005	-	0.0532	-	0.125	-	0.004	<0.0005	<0.0005	0.108
Pathway	0020_MW111	18 Oct 2021	0020_MW111_211018	ES2138638	13.2	1.62	0.21	14.8	18.4	18.2	-	-	0.10	<0.02	-	0.05	-	0.13	-	0.3	<0.02	<0.02	0.47
Pathway	0020_MW111	18 Oct 2021	0020_QC200_211018	281319	14	1.7	0.26	16	20	-	15	-	0.13	<0.02	-	0.06	-	0.12	-	0.34	<0.02	<0.05	0.59
Pathway	0020_MW111	08 Apr 2022	0020_MW111_220408	ES2212597	1.22	0.67	0.04	1.89	3.09	3.04	-	-	0.08	<0.02	-	<0.02	-	0.05	-	0.1	<0.02	<0.02	0.09
Pathway	0020_MW111	10 Oct 2022	0020_MW111_221010	ES2237104	1.71	0.55	0.05	2.26	3.03	2.93	-	-	0.03	<0.02	-	0.04	-	0.04	-	<0.1	<0.02	<0.02	0.07
Pathway	0020_MW111	17 Apr 2023	0020_MW111_230417	ES2313254	2.73	0.72	0.08	3.45	5.18	4.97	-	-	0.05	0.07	-	0.03	-	0.07	-	0.2	<0.02	<0.02	0.16
Pathway	0020_MW111	08 Apr 2024	0020_MW111_240408	ES2411964	14.4	1.31	0.14	15.7	17.8	17.4	-	-	0.09	<0.02	-	0.05	-	0.12	-	0.2	<0.02	<0.02	0.18
Pathway	0020_MW111	22 Oct 2024	0020_MW111_241022	ES2435143	4.22	0.99	0.11	5.21	7.50	7.30	-	-	0.08	<0.02	-	0.03	-	0.10	-	0.2	<0.02	<0.02	0.21
Pathway	0020_MW111	03 Apr 2025	0020_MW111_250403	ES2510618	18.6	1.94	0.14	20.5	23.1	22.7	-	-	0.09	<0.02	-	0.07	-	0.13	-	0.2	<0.02	<0.02	0.24
Pathway	0020_SW022	10 Apr 2017	F_SW01	ES1708884	6.57	1.47	0.111	8.04	9.28	8.78	-	-	0.170	0.0032	-	0.183	-	0.296	-	<0.002	0.0007	<0.0005	0.0421
Pathway	0020_SW022	18 Oct 2021	0020_SW022_211018	ES2138638	3.99	1.00	0.06	4.99	5.74	5.57	-	-	0.10	<0.02	-	0.07	-	0.10	-	<0.1	<0.02	<0.02	0.04
Pathway	0020_SW022	13 Dec 2021	0020_SW022_211213	ES2145964	2.95	0.97	0.07	3.92	4.89	4.72	-	-	0.09	<0.02	-	0.09	-	0.08	-	0.2	<0.02	<0.02	0.04
Pathway	0020_SW022	04 Apr 2022	0020_SW022_220404	ES2212597	2.33	1.03	0.07	3.36	4.23	4.07	-	-	0.06	<0.02	-	0.08	-	0.08	-	<0.1	<0.02	<0.02	0.04
Pathway	0020_SW022	08 Jul 2022	0020_SW022_220708	ES2224472	2.70	0.69	0.06	3.39	4.42	4.31	-	-	0.04	<0.02	-	0.05	-	0.06	-	<0.1	<0.02	<0.02	0.03
Pathway	0020_SW022	10 Oct 2022	0020_SW022_221010	ES2237104	3.21	0.74	0.07	3.95	4.96	4.84	-	-	0.06	<0.02	-	0.07	-	0.05	-	<0.1	<0.02	<0.02	0.03
Pathway	0020_SW022	17 Apr 2023	0020_QC102_230417	ES2313254	3.89	1.51	0.06	5.40	6.16	5.94	-	-	0.11	<0.02	-	0.06	-	0.16	-	<0.1	<0.02	<0.02	0.04
Pathway	0020_SW022	17 Apr 2023	0020_QC202_230417	321518	3.6	1.6	0.06	5.2	6.0	-	3.6	-	0.10	<0.02	-	0.06	-	0.16	-	0.04	<0.02	<0.05	0.03
Pathway	0020_SW022	18 Apr 2023	0020_SW022_230417	ES2313254	3.91	1.52	0.07	5.43	6.23	6.00	-	-	0.13	<0.02	-	0.07	-	0.16	-	<0.1	<0.02	<0.02	0.04

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids							Pf			
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL					0.0001	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	0.01	0.002	0.0005	0.0005	0.0005
PFAS NEMP 2025 Freshwater and Interim Marine 95%					0.13[#1]		220[#1]																
PFAS NEMP 2025 Recreational water quality					2[#2]	2[#2]	10[#2]	2[#2]															
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																			
Pathway	0020_SW022	08 Apr 2024	0020_SW022_240408	ES2411964	1.92	0.99	0.04	2.91	3.32	3.19	-	-	0.08	<0.02	-	0.03	-	0.10	-	<0.1	<0.02	<0.02	0.02
Pathway	0020_SW022	31 Mar 2025	0020_QC133_250331	ES2510618	0.19	0.11	<0.01	0.30	0.33	0.33	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_SW022	31 Mar 2025	0020_QC233_250331	1209674	0.21	0.12	<0.01	0.33	0.4	0.4	0.21	0.33	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.05	<0.01	<0.01	<0.01
Pathway	0020_SW022	31 Mar 2025	0020_SW022_250331	ES2510618	0.18	0.11	<0.01	0.29	0.31	0.31	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_SW023	10 Apr 2017	F_SW02	ES1708884	0.429	0.537	0.0414	0.966	1.74	1.48	-	-	0.0594	<0.0005	-	0.0404	-	0.142	-	<0.002	0.0081	0.0015	0.0547
Pathway	0020_SW023	19 Oct 2021	0020_SW023_211019	ES2138638	0.29	0.06	0.01	0.35	0.55	0.55	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_SW023	13 Dec 2021	0020_SW023_211213	ES2145964	0.78	0.17	0.03	0.95	1.49	1.47	-	-	0.03	<0.02	-	<0.02	-	0.02	-	<0.1	<0.02	<0.02	0.03
Pathway	0020_SW023	04 Apr 2022	0020_SW023_220404	ES2212597	0.98	0.78	0.04	1.76	2.94	2.86	-	-	0.08	<0.02	-	0.03	-	0.05	-	0.1	<0.02	<0.02	0.07
Pathway	0020_SW023	08 Jul 2022	0020_SW023_220708	ES2224472	1.33	0.86	0.04	2.19	3.10	2.95	-	-	0.19	<0.02	-	0.03	-	0.12	-	<0.1	<0.02	<0.02	0.05
Pathway	0020_SW023	10 Oct 2022	0020_SW023_221010	ES2237104	1.40	0.56	0.03	1.96	2.42	2.36	-	-	0.04	<0.02	-	0.03	-	0.03	-	<0.1	<0.02	<0.02	0.03
Pathway	0020_SW023	17 Apr 2023	0020_SW023_230417	ES2313254	0.24	0.25	0.01	0.49	0.73	0.71	-	-	0.04	<0.02	-	<0.02	-	0.02	-	<0.1	<0.02	<0.02	0.02
Pathway	0020_SW023	08 Apr 2024	0020_SW023_240408	ES2411964	0.30	0.43	0.03	0.73	1.43	1.35	-	-	0.07	<0.02	-	<0.02	-	0.05	-	<0.1	<0.02	<0.02	0.05
Pathway	0020_SW023	31 Mar 2025	0020_SW023_250331	ES2510618	0.20	0.10	<0.01	0.30	0.44	0.44	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_SW030	20 Apr 2017	FC_SW05	ES1709644	0.0520	0.0573	0.0010	0.109	0.124	0.117	-	-	0.0034	<0.0005	-	0.0021	-	0.0046	-	<0.002	<0.0005	<0.0005	<0.0005
Pathway	0020_SW030	30 Apr 2018	FC_QC113_180430	ES1812871	0.10	0.16	<0.01	0.26	0.26	0.26	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_SW030	30 Apr 2018	FC_SW05_180430	ES1812871	0.0962	0.125	<0.0020[#4]	0.221	0.246	0.234	-	-	0.0076	<0.0020[#4]	-	0.0022	-	0.0100	-	<0.002	<0.0020[#4]	<0.0020[#4]	<0.0020[#4]
Pathway	0020_SW030	19 Oct 2021	0020_QC204_211019	281319	0.08	0.13	<0.01	0.20	0.20	-	0.08	-	<0.01	<0.02	-	<0.01	-	<0.01	-	<0.02	<0.02	<0.05	<0.01
Pathway	0020_SW030	19 Oct 2021	0020_SW030_211019	ES2138638	0.08	0.12	<0.01	0.20	0.20	0.20	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_SW030	04 Apr 2022	0020_SW030_220404	ES2212597	0.05	0.05	<0.01	0.10	0.10	0.10	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_SW030	12 Apr 2022	0020_SW030_220412	ES2213152	0.06	0.06	<0.01	0.12	0.12	0.12	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_SW030	08 Jul 2022	0020_QC104_220708	ES2224472	0.06	0.06	<0.01	0.12	0.12	0.12	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_SW030	08 Jul 2022	0020_QC204_220708	905319	0.05[#3]	0.05[#3]	<0.01	0.1	0.1	0.1	0.05	0.1	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01
Pathway	0020_SW030	08 Jul 2022	0020_SW030_220708	ES2224472	0.05	0.05	<0.01	0.10	0.10	0.10	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_SW030	12 Oct 2022	0020_SW030_221012	ES2236866	0.07	0.07	<0.01	0.14	0.14	0.14	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_SW030	12 Oct 2022	0020_SW030_221012	ES2237104	0.05	0.06	<0.01	0.11	0.11	0.11	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_SW030	01 Feb 2023	0020_SW030_230201	ES2303447	0.09	0.11	<0.01	0.20	0.20	0.20	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_SW030	17 Apr 2023	0020_QC101_230417	ES2313254	0.07	0.11	<0.01	0.18	0.18	0.18	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_SW030	17 Apr 2023	0020_QC201_230417	321518	0.07	0.1	<0.01	0.17	0.17	-	0.07	-	<0.01	<0.02	-	<0.01	-	<0.01	-	<0.02	<0.02	<0.05	<0.01
Pathway	0020_SW030	17 Apr 2023	0020_SW030_230417	ES2313254	0.09	0.10	<0.01	0.19	0.19	0.19	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_SW030	16 Oct 2023	0020_SW030_ 231016	ES2336397	0.04	0.05	<0.01	0.09	0.09	0.09	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_SW030	08 Apr 2024	0020_SW030_240408	ES2411964	0.11	0.09	<0.01	0.20	0.20	0.20	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_SW030	26 Oct 2024	0020_SW030_241026	ES2435539	0.03	0.04	<0.01	0.07	0.07	0.07	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_SW030	31 Mar 2025	0020_SW030_250331	ES2510618	0.07	0.12	<0.01	0.19	0.19	0.19	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_SW032	21 Mar 2018	FC_SW13_180321	ES1808818	0.0922	0.0516	0.0015	0.144	0.153	0.149	-	-	<0.0005	<0.0005	-	0.0016	-	0.0017	-	<0.002	<0.0005	<0.0005	0.0008
Pathway	0020_SW032	19 Oct 2021	0020_QC104_211019	ES2138638	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
Pathway	0020_SW032	19 Oct 2021	0020_SW032_211019	ES2138638	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
Pathway	0020_SW032	04 Apr 2022	0020_SW032_220404	ES2212597	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
Pathway	0020_SW032	12 Oct 2022	0020_SW032_221012	ES2237104	<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
Pathway	0020_SW032	17 Apr 2023	0020_SW032_230417	ES2313254	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
Pathway	0020_SW032	16 Oct 2023	0020_QC101_ 231016	ES2336397	0.25	0.21	<0.01	0.46	0.46	0.46	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_SW032	16 Oct 2023	0020_QC201_231016	335710	0.27	0.27	<0.01	0.54	0.57	-	0.27	-	<0.01	<0.02	-	0.01	-	0.02	-	<0.02	<0.02	<0.05	<0.01
Pathway	0020_SW032	16 Oct 2023	0020_SW032_ 231016	ES2336397	0.26	0.21	<0.01	0.47	0.47	0.47	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_SW032	08 Apr 2024	0020_SW032_240408	ES2411964	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
Pathway	0020_SW032	31 Mar 2025	0020_QC152_250331	ES2510618	<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
Pathway	0020_SW032	31 Mar 2025	0020_SW032_250331	ES2510618	<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
Pathway	0020_SW054	12 Apr 2022	0020_SW054_220412	ES2213152	0.46	0.32	0.02	0.78	1.10	1.06	-	-	0.02	<0.02	-	0.02	-	0.02	-	<0.1	<0.02	<0.02	0.03
Pathway	0020_SW054	07 Jul 2022	0020_SW054_220707	ES2224472	0.28	0.20	0.02	0.48	0.63	0.63	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_SW054	12 Oct 2022	0020_QC126_221012	ES2236866	0.47	0.27	0.03	0.74	0.99	0.97	-	-	<0.02	<0.02	-	0.02	-	<0.02	-	<0.1	<0.02	<0.02	0.02
Pathway	0020_SW054	12 Oct 2022	0020_SW054_221012	ES2236866	0.50	0.25	0.03	0.75	1.02	1.00	-	-	<0.02	<0.02	-	0.02	-	<0.02	-	<0.1	<0.02	<0.02	0.02
Pathway	0020_SW054	30 Jan 2023	0020_QC220_230130	961653	0.53[#3]	0.46[#3]	0.02[#3]	0.99	1.33	1.25	0.55	1.01	0.02	<0.01	<0.01	0.05[#3]	<0.01	0.03	-	<0.05	<0.01	<0.01	0.02[#3]
Pathway	0020_SW054	30 Jan 2023	0020_SW054_230130	ES2303447	0.48	0.46	0.02	0.94	1.21	1.16	-	-	0.02	<0.02	-	0.02	-	0.03	-	<0.1	<0.02	<0.02	<0.02
Pathway	0020_SW054	21 Oct 2024	0020_SW054_241021	ES2435143	0.78	0.37	0.04	1.15	1.51	1.43	-	-	<0.02	<0.02	-	0.06	-	0.02	-	<0.1	<0.02	<0.02	0.03
Pathway	0021_MW125	04 May 2017	FC_MW01	ES1711220	0.0846	0.108	0.0026	0.193	0.229	0.213	-	-	0.0059	<0.0005	-	0.0049	-	0.0104	-	<0.002	<0.0005	<0.0005	0.0009
Pathway	0021_MW125	03 May 2018	FC_MW01_180503	ES1812871	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_MW125	14 Feb 2019	FC_MW01_190214	ES1905115	0.0332	0.0839	0.0010	0.117	0.165	0.147	-	-	0.0160	<0.0005	-	0.0005	-	0.0174	-	<0.002	<0.0005	<0.0005	0.0009
Pathway	0021_MW125	29 May 2019	FC_MW01_190529	ES1916831	0.0612	0.0808	0.0021	0.142	0.197	0.174	-	-	0.0136	<0.0005	-	0.0029	-	0.0204	-	<0.002	<0.0005	<0.0005	0.0012
Pathway	0021_MW125	20 Oct 2021	0021_MW125_211020	ES2138639	0.04	0.07	<0.01	0.11	0.11	0.11	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_MW125	20 Oct 2021	0021_QC207_211020	281322	0.03	0.06	<0.01	0.09	0.12	-	0.03	-	0.01	<0.02	-	<0.01	-	0.01	-	<0.02	<0.02	<0.05	<0.01
Pathway	0021_MW125	07 Apr 2022	0021_MW125_220407	ES2212442	0.03	0.07	<0.01	0.10	0.10	0.10	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_MW125	14 Oct 2022	0021_MW125_221014	ES2237106	0.02	0.07	<0.01	0.09	0.09	0.09	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_MW125	02 Feb 2023	0021_MW125_230202	ES2303446	0.11	0.09	<0.01	0.20	0.20	0.20	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_MW125	02 Feb 2023	0021_QC203_230202	961655	0.14[#3]	0.09[#3]	<0.01	0.23	0.26	0.25	0.14	0.23	0.01	<0.01	<0.01	<0.01	<0.01	0.01	-	<0.05	<0.01	<0.01	<0.01
Pathway	0021_MW125	19 Apr 2023	0021_MW125_230419	ES2313364	0.04	0.11	<0.01	0.15	0.15	0.15	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids							Pf			
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL					0.0001	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	0.01	0.002	0.0005	0.0005	0.0005
PFAS NEMP 2025 Freshwater and Interim Marine 95%					0.13[#1]		220[#1]																
PFAS NEMP 2025 Recreational water quality					2[#2]	2[#2]	10[#2]	2[#2]															
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																			
Pathway	0021_MW125	19 Apr 2023	0021_QC104_230419	ES2313364	0.03	0.06	<0.01	0.09	0.09	0.09	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_MW125	19 Apr 2023	0021_QC204_230419	321517	0.03	0.10	<0.01	0.14	0.16	-	0.03	-	<0.01	<0.02	-	<0.01	-	0.02	-	<0.02	<0.02	<0.05	<0.01
Pathway	0021_MW125	18 Oct 2023	0021_MW125_231018	ES2336398	0.02	0.07	<0.01	0.09	0.09	0.09	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_MW125	10 Apr 2024	0021_MW125_240410	ES2411994	0.03	0.08	<0.01	0.11	0.11	0.11	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_MW125	26 Oct 2024	0021_MW125_241026	ES2435541	0.02	0.07	<0.01	0.09	0.09	0.09	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_MW126	04 May 2017	FC_MW02	ES1711220	0.0013	0.0028	<0.0005	0.0041	0.0041	0.0041	-	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	-	<0.002	<0.0005	<0.0005	<0.0005
Pathway	0021_MW126	20 Oct 2021	0021_MW126_211020	ES2138639	<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
Pathway	0021_MW126	20 Oct 2021	0021_QC108_211020	ES2138639	<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
Pathway	0021_MW126	07 Apr 2022	0021_MW126_220407	ES2212442	<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
Pathway	0021_MW126	07 Apr 2022	0021_QC209_220407	293031	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.01	<0.02	-	<0.01	-	<0.01	-	<0.02	<0.02	<0.05	<0.01
Pathway	0021_MW126	13 Oct 2022	0021_MW126_221013	ES2237106	<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
Pathway	0021_MW126	02 Feb 2023	0021_MW126_230202	ES2303446	<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
Pathway	0021_MW126	19 Apr 2023	0021_MW126_230419	ES2313364	<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
Pathway	0021_MW126	18 Oct 2023	0021_MW126_231018	ES2336398	<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
Pathway	0021_MW126	18 Oct 2023	0021_QC105_231018	ES2336399	<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
Pathway	0021_MW126	18 Oct 2023	0021_QC205_231018	335876	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.01	<0.02	-	<0.01	-	<0.01	-	<0.02	<0.02	<0.05	<0.01
Pathway	0021_MW126	10 Apr 2024	0021_MW126_240410	ES2411994	<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
Pathway	0021_MW126	26 Oct 2024	0021_MW126_241026	ES2435541	<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
Pathway	0021_MW126	26 Oct 2024	0021_QC116_241026	ES2435541	<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
Pathway	0021_MW126	26 Oct 2024	0021_QC216_241026	1156160	<0.01	<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	-	<0.05	<0.01	<0.01	<0.01
Pathway	0021_MW126	01 Apr 2025	0021_MW126_250401	ES2510113	<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
Pathway	0021_MW126	01 Apr 2025	0021_QC105_250401	ES2510113	<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
Pathway	0021_MW126	01 Apr 2025	0021_QC205_250401	1210052	<0.01	<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	-	<0.05	<0.01	<0.01	<0.01
Pathway	0021_MW128	04 May 2017	LM_MW01	ES1711220	0.0012	0.0231	<0.0005	0.0243	0.0319	0.0271	-	-	0.0028	<0.0005	-	<0.0005	-	0.0048	-	<0.002	<0.0005	<0.0005	<0.0005
Pathway	0021_MW128	03 May 2018	LM_MW01_180503	ES1812871	1.09	0.72	0.03	1.81	2.14	2.03	-	-	0.03	<0.02	-	0.06	-	0.05	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_MW128	14 Feb 2019	LM_MW01_190214	ES1905115	0.0011	0.0217	<0.0005	0.0228	0.0283	0.0256	-	-	0.0028	<0.0005	-	<0.0005	-	0.0027	-	<0.002	<0.0005	<0.0005	<0.0005
Pathway	0021_MW128	29 May 2019	0021_QC100_190529	ES1916831	0.0013	0.0114	<0.0005	0.0127	0.0179	0.0149	-	-	0.0022	<0.0005	-	<0.0005	-	0.0030	-	<0.002	<0.0005	<0.0005	<0.0005
Pathway	0021_MW128	29 May 2019	LM_MW01_190529	ES1916831	0.0012	0.0151	<0.0005	0.0163	0.0224	0.0187	-	-	0.0024	<0.0005	-	<0.0005	-	0.0037	-	<0.002	<0.0005	<0.0005	<0.0005
Pathway	0021_MW128	20 Oct 2021	0021_MW128_211020	ES2138639	0.04	0.03	<0.01	0.07	0.07	0.07	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_MW128	20 Oct 2021	0021_QC107_211020	ES2138639	<0.01	0.02	<0.01	0.02	0.02	0.02	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_MW128	21 Dec 2021	0021_MW128_211221	ES2147061	<0.01	0.02	<0.01	0.02	0.02	0.02	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_MW128	21 Dec 2021	0021_QC112_211221	ES2147061	<0.01	0.03	<0.01	0.03	0.03	0.03	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_MW128	21 Dec 2021	0021_QC212_211221	853283	<0.01	0.02[#3]	<0.01	0.02	<0.1	<0.05	<0.01	0.02	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01
Pathway	0021_MW128	06 Apr 2022	0021_MW128_220406	ES2212442	<0.01	0.04	<0.01	0.04	0.04	0.04	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_MW128	14 Oct 2022	0021_MW128_221014	ES2237106	<0.01	0.10	<0.01	0.10	0.10	0.10	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_MW128	01 Feb 2023	0021_MW128_230201	ES2303446	<0.01	0.03	<0.01	0.03	0.03	0.03	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_MW128	19 Apr 2023	0021_MW128_230419	ES2313364	<0.01	0.05	<0.01	0.05	0.05	0.05	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_MW128	18 Oct 2023	0021_MW128_231018	ES2336398	<0.01	0.06	<0.01	0.06	0.06	0.06	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_MW128	10 Apr 2024	0021_MW128_240410	ES2411994	<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
Pathway	0021_MW128	10 Apr 2024	0021_QC104_240410	ES2411994	<0.01	0.03	<0.01	0.03	0.03	0.03	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_MW128	10 Apr 2024	0021_QC204_240410	348825	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.01	<0.02	-	<0.01	-	<0.01	-	<0.02	<0.02	<0.05	<0.01
Pathway	0021_MW128	23 Oct 2024	0021_MW128_241023	ES2435078	<0.01	0.10	<0.01	0.10	0.10	0.10	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_MW128	02 Apr 2025	0021_MW128_250402	ES2510113	<0.01	0.04	<0.01	0.04	0.04	0.04	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_MW128	02 Apr 2025	0021_QC155_250402	ES2510113	<0.01	0.03	<0.01	0.03	0.03	0.03	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_MW160	21 Dec 2021	0021_MW160_211221	ES2147061	<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
Pathway	0021_MW160	23 Oct 2024	0021_MW160_241023	ES2435078	<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
Pathway	0021_MW160	23 Oct 2024	0021_QC105_241023	ES2435078	<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
Pathway	0021_MW160	23 Oct 2024	0021_QC205_241023	1154751	<0.01	<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	-	<0.05	<0.01	<0.01	<0.01
Pathway	0021_MW160	02 Apr 2025	0021_MW160_250402	ES2510113	<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
Pathway	0021_MW160	02 Apr 2025	0021_QC254_250402	1210052	<0.01	<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	-	<0.05	<0.01	<0.01	<0.01
Pathway	0021_MW163	11 Apr 2022	0021_MW163_220411	ES2213156	0.77	0.31	0.03	1.08	1.41	1.39	-	-	0.02	<0.02	-	<0.02	-	0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_MW163	11 Oct 2022	0021_MW163_221011	ES2236834	0.40	0.09	0.06	0.49	0.80	0.80	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	0.02
Pathway	0021_MW163	02 Feb 2023	0021_MW163_230202	ES2303446	0.57	0.18	0.04	0.75	0.94	0.94	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_MW163	02 Feb 2023	0021_QC103_230202	ES2303446	0.48	0.16	0.03	0.64	0.79	0.79	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_MW163	23 Oct 2024	0021_MW163_241023	ES2435078	1.62	0.15	0.02	1.77	1.88	1.85	-	-	0.03	<0.02	-	<0.02	-	0.03	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_MW163	02 Apr 2025	0021_MW163_250402	ES2510113	0.51	0.12	<0.01	0.63	0.63	0.63	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_MW164	11 Apr 2022	0021_MW164_220411	ES2213156	9.73	1.61	0.09	11.3	12.0	11.9	-	-	0.02	<0.02	-	0.06	-	0.06	-	<0.1	<0.02	<0.02	0.04
Pathway	0021_MW164	11 Apr 2022	0021_QC100_220411	ES2213156	7.58	1.59	0.08	9.17	9.80	9.68	-	-	0.02	<0.02	-	0.06	-	0.06	-	<0.1	<0.02	<0.02	0.04
Pathway	0021_MW164	11 Oct 2022	0021_MW164_221011	ES2236834	7.10	0.97	0.05	8.07	8.58	8.49	-	-	<0.02	<0.02	-	0.04	-	0.05	-	<0.1	<0.02	<0.02	0.04
Pathway	0021_MW164	11 Oct 2022	0021_QC125_221011	ES2236834	7.92	0.92	0.06	8.84	9.31	9.22	-	-	<0.02	<0.02	-	0.05	-	0.04	-	<0.1	<0.02	<0.02	0.03
Pathway	0021_MW164	03 Feb 2023	0021_MW164_230203	ES2303695	5.63	0.46	0.05	6.09	6.26	6.22	-	-	<0.02	<0.02	-	0.04	-	<0.02	-	<0.1	<0.02	<0.02	0.02
Pathway	0021_MW164	22 Oct 2024	0021_MW164_241022	ES2435078	2.61	0.29	0.01	2.90	3.17	2.93	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_MW164	02 Apr 2025	0021_MW164_250402	ES2510113	2.86	0.26	<0.01	3.12	3.41	3.12	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids							Pf			
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL					0.0001	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	0.01	0.002	0.0005	0.0005	0.0005
PFAS NEMP 2025 Freshwater and Interim Marine 95%					0.13[#1]		220[#1]																
PFAS NEMP 2025 Recreational water quality					2[#2]	2[#2]	10[#2]	2[#2]															
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																			
Pathway	0021_SW020	13 Apr 2017	DC_SW05	ES1709064	0.297	0.368	0.0153	0.665	0.812	0.759	-	-	0.0277	0.0006	-	0.0141	-	0.0382	-	<0.002	<0.0005	<0.0005	0.0071
Pathway	0021_SW020	20 Oct 2021	0021_SW020_211020	ES2138639	0.14	0.32	<0.01	0.46	0.57	0.53	-	-	0.04	<0.02	-	<0.02	-	0.04	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_SW020	06 Apr 2022	0021_SW020_220406	ES2212442	0.02	0.03	<0.01	0.05	0.05	0.05	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_SW020	07 Jul 2022	0021_SW020_220707	ES2224473	0.07	0.12	<0.01	0.19	0.19	0.19	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_SW020	14 Oct 2022	0021_SW020_221014	ES2237106	0.44	0.46	0.02	0.90	1.08	1.04	-	-	0.02	<0.02	-	<0.02	-	0.04	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_SW020	03 Feb 2023	0021_QC205_230203	961542	0.45[#3]	0.54[#3]	<0.01	0.99	1.25	1.16	0.45	0.99	0.06	<0.01	<0.01	0.01	0.02	0.06[#3]	-	<0.05	<0.01	<0.01	<0.01
Pathway	0021_SW020	03 Feb 2023	0021_SW020_230203	ES2303695	0.35	0.53	0.01	0.88	1.10	1.04	-	-	0.05	<0.02	-	<0.02	-	0.06	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_SW020	21 Apr 2023	0021_SW020_230421	ES2313364	0.62	0.66	0.02	1.28	1.59	1.50	-	-	0.05	<0.02	-	0.02	-	0.07	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_SW020	12 Apr 2024	0021_SW020_240412	ES2412012	0.25	0.38	<0.01	0.63	0.74	0.70	-	-	0.04	<0.02	-	<0.02	-	0.04	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_SW020	22 Oct 2024	0021_SW020_241022	ES2435078	0.34	0.47	0.02	0.81	1.01	0.96	-	-	0.04	<0.02	-	<0.02	-	0.05	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_SW020	02 Apr 2025	0021_SW020_250402	ES2510622	0.09	0.16	<0.01	0.25	0.25	0.25	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_SW022	19 Apr 2017	FC_SW06	ES1709535	0.103	0.124	0.002	0.227	0.266	0.251	-	-	0.0088	<0.0005	-	0.0029	-	0.0113	-	<0.002	<0.0005	<0.0005	0.0014
Pathway	0021_SW022	20 Oct 2021	0021_QC208_211020	281322	0.28	0.65	0.02	0.93	1.2	-	0.30	-	0.05	<0.02	-	0.02	-	0.07	-	<0.02	<0.02	<0.05	0.01
Pathway	0021_SW022	20 Oct 2021	0021_SW022_211020	ES2138639	0.31	0.72	0.02	1.03	1.29	1.21	-	-	0.05	<0.02	-	<0.02	-	0.08	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_SW022	07 Apr 2022	0021_SW022_220407	ES2212442	0.07	0.08	<0.01	0.15	0.15	0.15	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_SW022	12 Oct 2022	0021_SW022_221012	ES2237106	0.39	0.36	0.02	0.75	0.89	0.87	-	-	<0.02	<0.02	-	<0.02	-	0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_SW022	19 Apr 2023	0021_SW022_230419	ES2313364	0.65	0.81	0.04	1.46	1.74	1.65	-	-	0.06	<0.02	-	0.03	-	0.06	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_SW022	18 Oct 2023	0021_SW022_231018	ES2336399	0.43	0.33	0.01	0.76	0.82	0.80	-	-	<0.02	<0.02	-	<0.02	-	0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_SW022	10 Apr 2024	0021_SW022_240410	ES2412012	0.39	0.98	0.02	1.37	1.59	1.49	-	-	0.05	<0.02	-	0.02	-	0.08	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_SW022	26 Oct 2024	0021_SW022_241026	ES2435541	0.25	0.16	<0.01	0.41	0.41	0.41	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_SW022	03 Apr 2025	0021_SW022_250403	ES2510622	0.16	0.23	<0.01	0.39	0.39	0.39	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_SW024	19 Apr 2017	FC_SW08	ES1709535	0.0342	0.0476	0.0027	0.0818	0.0936	0.0895	-	-	0.0027	<0.0005	-	0.0023	-	0.0018	-	<0.002	<0.0005	<0.0005	<0.0005
Pathway	0021_SW024	19 Apr 2017	JCQA03	ES1709535	0.0335	0.0431	0.0023	0.0766	0.0864	0.0829	-	-	0.002	<0.0005	-	0.002	-	0.0015	-	<0.002	<0.0005	<0.0005	<0.0005
Pathway	0021_SW024	20 Oct 2021	0021_SW024_211020	ES2138639	0.02	0.07	<0.01	0.09	0.09	0.09	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_SW024	07 Apr 2022	0021_SW024_220407	ES2212442	<0.01	0.02	<0.01	0.02	0.02	0.02	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_SW024	13 Oct 2022	0021_SW024_221013	ES2237106	0.02	0.05	<0.01	0.07	0.07	0.07	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_SW024	19 Apr 2023	0021_SW024_230419	ES2313364	0.03	0.09	<0.01	0.12	0.12	0.12	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_SW024	10 Apr 2024	0021_SW024_240410	ES2412012	0.02	0.05	<0.01	0.07	0.07	0.07	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_SW024	03 Apr 2025	0021_SW024_250403	ES2510622	<0.01	0.03	<0.01	0.03	0.03	0.03	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_SW025	20 Apr 2017	FC_SW09	ES1709644	0.0574	0.0236	<0.0005	0.0810	0.0867	0.0840	-	-	0.0011	<0.0005	-	0.0012	-	0.0015	-	<0.002	<0.0005	<0.0005	<0.0005
Pathway	0021_SW025	26 Oct 2021	0021_SW025_211026	ES2138639	0.12	0.10	<0.01	0.22	0.22	0.22	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_SW025	07 Apr 2022	0021_SW025_220407	ES2212442	0.11	0.05	<0.01	0.16	0.16	0.16	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_SW025	13 Oct 2022	0021_SW025_221013	ES2237106	0.14	0.06	0.01	0.20	0.23	0.23	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_SW025	19 Apr 2023	0021_SW025_230419	ES2313364	0.16	0.06	<0.01	0.22	0.22	0.22	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_SW025	10 Apr 2024	0021_SW025_240410	ES2412012	0.07	0.10	<0.01	0.17	0.17	0.17	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Pathway	0021_SW025	04 Apr 2025	0021_SW025_250404	ES2510622	0.10	0.08	<0.01	0.18	0.18	0.18	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Receptor	0020_SW026	19 Apr 2017	FC_SW01	ES1709535	0.0962	0.0921	0.0012	0.188	0.211	0.2	-	-	0.0065	<0.0005	-	0.0038	-	0.0072	-	<0.002	<0.0005	<0.0005	0.0006
Receptor	0020_SW026	15 May 2018	FC_QC216_180515	599245	0.01[#3]	0.02[#3]	<0.01	0.03	<0.1	<0.05	-	-	<0.01	<0.01	-	<0.01	-	<0.01	-	<0.05	<0.01	<0.01	<0.01
Receptor	0020_SW026	15 May 2018	FC_SW01_180515	ES1814324	0.0123	0.0293	<0.0005	0.0416	0.0514	0.0473	-	-	0.0025	<0.0005	-	0.0020	-	0.0021	-	<0.002	<0.0005	<0.0005	<0.0005
Receptor	0020_SW026	19 Oct 2021	0020_SW026_211019	ES2138638	0.01	0.03	<0.01	0.04	0.04	0.04	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Receptor	0020_SW026	04 Apr 2022	0020_QC203_220404	293030	<0.01	0.02	<0.01	0.02	0.02	-	<0.01	-	<0.01	<0.02	-	<0.01	-	<0.01	-	<0.02	<0.02	<0.05	<0.01
Receptor	0020_SW026	04 Apr 2022	0020_SW026_220404	ES2212597	0.07	0.06	<0.01	0.13	0.13	0.13	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Receptor	0020_SW026	07 Jul 2022	0020_QC103_220707	ES2224472	0.04	0.04	<0.01	0.08	0.08	0.08	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Receptor	0020_SW026	07 Jul 2022	0020_QC203_220707	905319	0.04[#3]	0.04[#3]	<0.01	0.08	<0.1	0.08	0.04	0.08	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01
Receptor	0020_SW026	07 Jul 2022	0020_SW026_220707	ES2224472	0.04	0.04	<0.01	0.08	0.08	0.08	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Receptor	0020_SW026	10 Oct 2022	0020_SW026_221010	ES2237104	0.06	0.05	<0.01	0.11	0.11	0.11	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Receptor	0020_SW026	30 Jan 2023	0020_SW026_230130	ES2303447	0.09	0.09	<0.01	0.18	0.20	0.20	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Receptor	0020_SW026	17 Apr 2023	0020_SW026_230417	ES2313254	0.04	0.05	<0.01	0.09	0.09	0.09	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Receptor	0020_SW026	16 Oct 2023	0020_SW026_ 231016	ES2336397	<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
Receptor	0020_SW026	08 Apr 2024	0020_SW026_240408	ES2411964	0.08	0.06	<0.01	0.14	0.14	0.14	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Receptor	0020_SW026	25 Oct 2024	0020_QC112_241025	ES2435539	<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
Receptor	0020_SW026	25 Oct 2024	0020_QC212_241025	1156671	0.03	<0.01	<0.01	0.03	<0.1	<0.05	0.03	0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.05	<0.01	<0.01	<0.01
Receptor	0020_SW026	25 Oct 2024	0020_SW026_241025	ES2435539	<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
Receptor	0020_SW026	01 Apr 2025	0020_QC251_250401	1209674	<0.01	<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	-	<0.05	<0.01	<0.01	<0.01
Receptor	0020_SW026	01 Apr 2025	0020_SW026_250401	ES2510618	<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
Receptor	0020_SW027	19 Apr 2017	FC_SW02	ES1709535	0.0667	0.0933	0.0012	0.16	0.185	0.173	-	-	0.0069	<0.0005	-	0.0044	-	0.0075	-	<0.002	<0.0005	<0.0005	0.0007
Receptor	0020_SW027	15 May 2018	FC_SW02_180515	ES1814324	0.0171	0.0396	<0.0005	0.0567	0.0702	0.0648	-	-	0.0031	<0.0005	-	0.0023	-	0.0031	-	<0.002	<0.0005	<0.0005	0.0006
Receptor	0020_SW027	19 Oct 2021	0020_SW027_211019	ES2138638	0.03	0.06	<0.01	0.09	0.09	0.09	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Receptor	0020_SW027	04 Apr 2022	0020_QC103_220404	ES2212597	0.06	0.05	<0.01	0.11	0.11	0.11	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Receptor	0020_SW027	04 Apr 2022	0020_SW027_220404	ES2212597	0.04	0.04	<0.01	0.08	0.08	0.08	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Receptor	0020_SW027	07 Jul 2022	0020_SW027_220707	ES2224472	0.05	0.04	<0.01	0.09	0.09	0.09	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Receptor	0020_SW027	10 Oct 2022	0020_SW027_221010	ES2237104	0.04	0.06	<0.01	0.10	0.10	0.10	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Receptor	0020_SW027	30 Jan 2023	0020_SW027_230130	ES2303447	0.11	0.12	<0.01	0.23	0.26	0.26	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids							Pf			
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL					0.0001	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	0.01	0.002	0.0005	0.0005	0.0005
PFAS NEMP 2025 Freshwater and Interim Marine 95%					0.13[#1]		220[#1]																
PFAS NEMP 2025 Recreational water quality					2[#2]	2[#2]	10[#2]	2[#2]															
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																			
Receptor	0020_SW027	17 Apr 2023	0020_SW027_230417	ES2313254	0.13	0.14	<0.01	0.27	0.29	0.29	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Receptor	0020_SW027	16 Oct 2023	0020_SW027_ 231016	ES2336397	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
Receptor	0020_SW027	08 Apr 2024	0020_SW027_240408	ES2411964	0.06	0.07	<0.01	0.13	0.13	0.13	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Receptor	0020_SW027	25 Oct 2024	0020_SW027_241025	ES2435539	0.06	0.05	<0.01	0.11	0.11	0.11	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Receptor	0020_SW027	01 Apr 2025	0020_QC250_250401	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	<0.01	-	<0.05	<0.01	<0.01	<0.01
Receptor	0020_SW027	01 Apr 2025	0020_SW027_250401	ES2510618	0.04	0.04	<0.01	0.08	0.08	0.08	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Receptor	0020_SW029	19 Apr 2017	FC_SW04	ES1709535	0.0709	0.0774	0.001	0.148	0.171	0.16	-	-	0.0051	<0.0005	-	0.0039	-	0.0064	-	<0.002	<0.0005	<0.0005	0.0006
Receptor	0020_SW029	15 May 2018	FC_SW04_180515	ES1814324	0.0492	0.0954	0.0012	0.145	0.176	0.164	-	-	0.0078	<0.0005	-	0.0054	-	0.0072	-	<0.002	<0.0005	<0.0005	0.0010
Receptor	0020_SW029	18 Oct 2021	0020_SW029_211018	ES2138638	0.04	0.06	<0.01	0.10	0.10	0.10	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Receptor	0020_SW029	04 Apr 2022	0020_QC104_220404	ES2212597	0.03	0.03	<0.01	0.06	0.06	0.06	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Receptor	0020_SW029	04 Apr 2022	0020_QC204_220404	293030	0.03	0.03	<0.01	0.06	0.06	-	0.03	-	<0.01	<0.02	-	<0.01	-	<0.01	-	<0.02	<0.02	<0.05	<0.01
Receptor	0020_SW029	04 Apr 2022	0020_SW029_220404	ES2212597	0.03	0.03	<0.01	0.06	0.06	0.06	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Receptor	0020_SW029	10 Oct 2022	0020_SW029_221011	ES2237104	0.06	0.05	<0.01	0.11	0.11	0.11	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Receptor	0020_SW029	17 Apr 2023	0020_SW029_230417	ES2313254	0.05	0.05	<0.01	0.10	0.10	0.10	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Receptor	0020_SW029	16 Oct 2023	0020_SW029_ 231016	ES2336397	0.04	0.04	<0.01	0.08	0.08	0.08	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Receptor	0020_SW029	08 Apr 2024	0020_SW029_240408	ES2411964	0.06	0.06	<0.01	0.12	0.12	0.12	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Receptor	0020_SW029	21 Oct 2024	0020_QC151_241021	ES2435143	0.02	0.02	<0.01	0.04	0.04	0.04	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Receptor	0020_SW029	21 Oct 2024	0020_SW029_241021	ES2435143	0.02	0.02	<0.01	0.04	0.04	0.04	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Receptor	0020_SW029	31 Mar 2025	0020_SW029_250331	ES2510618	0.04	0.04	<0.01	0.08	0.08	0.08	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Receptor	0020_SW033	06 Apr 2018	FC_SW14_180406	ES1810551	0.0041	0.0056	<0.0005	0.0097	0.0097	0.0097	-	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	-	<0.002	<0.0005	<0.0005	<0.0005
Receptor	0020_SW033	15 May 2018	FC_SW14_180515	ES1814324	0.0084	0.0200	<0.0005	0.0284	0.0349	0.0319	-	-	0.0017	<0.0005	-	0.0014	-	0.0016	-	<0.002	<0.0005	<0.0005	<0.0005
Receptor	0020_SW033	19 Oct 2021	0020_SW033_211019	ES2138638	<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
Receptor	0020_SW033	04 Apr 2022	0020_SW033_220404	ES2212597	0.02	0.01	<0.01	0.03	0.03	0.03	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Receptor	0020_SW033	10 Oct 2022	0020_SW033_221010	ES2237104	<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
Receptor	0020_SW033	17 Apr 2023	0020_SW033_230417	ES2313254	0.07	0.01	<0.01	0.08	0.08	0.08	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02
Receptor	0020_SW033	16 Oct 2023	0020_SW033_ 231016	ES2336397	<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
Receptor	0020_SW033	08 Apr 2024	0020_SW033_240408	ES2411964	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
Receptor	0020_SW033	25 Oct 2024	0020_SW033_241025	ES2435539	<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
Receptor	0020_SW033	01 Apr 2025	0020_SW033_250401	ES2510618	<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

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids							Pf			
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL	0.0001	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	0.01	0.002	0.0005	0.0005	0.0005
PFAS NEMP 2025 Freshwater and Interim Marine 95%	0.13[#1]		220[#1]																
PFAS NEMP 2025 Recreational water quality	2[#2]	2[#2]	10[#2]	2[#2]															
Statistics																			
Number of Results	408	408	408	408	408	389	40	21	408	408	17	408	21	408	4	408	408	408	408
Number of Detects	328	352	177	357	351	336	29	15	168	4	1	137	4	180	0	40	3	1	122
Minimum Concentration	0.0005	0.0024	<0.0005	0.0029	0.0029	0.0029	0.01	<0.01	<0.0005	<0.0005	0.01	0.0005	0.01	<0.0005	<0.01	0.002	<0.0005	<0.0005	<0.0005
Minimum Detect	0.0005	0.0024	0.0009	0.0029	0.0029	0.0029	0.01	0.02	0.0009	0.0006	0.01	0.0005	0.01	0.001	ND	0.002	0.0007	0.0015	0.0006
Maximum Concentration	33.9	13.9	0.87	47.1	50.3	49.2	15	8.6	1.51	0.07	0.01	0.93	0.35	1.8	<0.01	0.8	<0.02	<0.05	0.71
Maximum Detect	33.9	13.9	0.87	47.1	50.3	49.2	15	8.6	1.51	0.07	0.01	0.93	0.35	1.8	ND	0.8	0.0081	0.0015	0.71
Average Concentration *	1	0.66	0.039	1.7	2.2	2.1	0.9	1	0.055	0.0087	0.0053	0.038	0.024	0.066	0.005	0.062	0.0086	0.0093	0.031
Geometric Average *	0.1	0.11	0.0097	0.21	0.25	0.24	0.085	0.1	0.015	0.0064	0.0052	0.013	0.0075	0.017	0.005	0.033	0.0063	0.0065	0.011
Median Concentration *	0.0873	0.11	0.005	0.205	0.2295	0.22	0.075	0.1	0.01	0.01	0.005	0.01	0.005	0.01	0.005	0.05	0.01	0.01	0.01
Standard Deviation *	3	1.9	0.11	4.4	5.7	5.5	2.6	2.3	0.18	0.0044	0.0012	0.1	0.075	0.21	0	0.091	0.0032	0.0048	0.081
Geometric Standard Deviation *	11	7.2	4.6	10	11	11	10	12	3.7	3.2	1.2	3.8	2.8	3.9	1	4	3.2	3.3	4
95% UCL (Student's-t) *	1.272	0.814	0.0475	2.037	2.7	2.582	1.587	1.882	0.0701	0.0091	0.00581	0.0465	0.0523	0.0839	0.005	0.0693	0.00885	0.00965	0.0379
Number of Env Standard Exceedances	184	20	0	59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Env Standard Exceedances (Detects Only)	184	20	0	59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Detects	80	86	43	88	86	86	72	71	41	1	6	34	19	44	0	10	1	0	30
% of Non-Detects	20	14	57	12	14	14	28	29	59	99	94	66	81	56	100	90	99	100	70
% of Detects at or above Env Standards	45	5	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Results Below Env Standards or Non-Detect	55	95	100	86	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 Refer to Table 8 in PFAS NEMP 2025 for comments and notes
#2 Refer to Table 4 in PFAS NEMP 3.0 (2025) for comments and notes
#3 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.
#4 Reported Analyte LOR is higher than Requested Analyte LOR

Environmental Standards

HEPA, March 2025, PFAS NEMP 2025 Freshwater and Interim Marine 95%
HEPA, March 2025, PFAS NEMP 2025 Recreational water quality

				PFAS - Perfluoroalkyl Carboxylic Acids						PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
				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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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				0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 2025 Freshwater and Interim Marine 95%																				
PFAS NEMP 2025 Recreational water quality																				
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																
Source	0020_MW037	01 May 2017	MW037	ES1710866	0.163	<0.0005	0.0424	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Source	0020_MW037	18 Oct 2021	0020_MW037_211018	ES2138638	2.60	<0.02	1.40	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	0.06	1.78	<0.05
Source	0020_MW037	04 Apr 2022	0020_MW037_220404	ES2212597	1.54	<0.02	0.95	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	0.36	<0.05
Source	0020_MW037	10 Oct 2022	0020_MW037_221010	ES2237104	2.76	<0.02	1.73	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	0.05	3.16	<0.05
Source	0020_MW037	17 Apr 2023	0020_MW037_230417	ES2313254	2.35	<0.02	1.87	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	1.18	<0.05
Source	0020_MW037	16 Oct 2023	0020_MW037_ 231016	ES2336397	2.54	<0.02	1.78	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	4.19	<0.05
Source	0020_MW037	16 Oct 2023	0020_SW037_ 231016	ES2336397	0.03	<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
Source	0020_MW037	08 Apr 2024	0020_MW037_240408	ES2411964	3.36	<0.02	2.49	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	5.60	<0.05
Source	0020_MW037	22 Oct 2024	0020_MW037_241022	ES2435143	3.85	<0.02	2.84	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	8.39	<0.05
Source	0020_MW037	31 Mar 2025	0020_MW037_250331	ES2510618	2.09	<0.02	1.21	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	3.58	<0.05
Source	0020_MW037	31 Mar 2025	0020_QC131_250331	ES2510618	1.83	<0.02	1.17	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	3.87	<0.05
Source	0020_MW037	31 Mar 2025	0020_QC231_250331	1209674	1.9	<0.01	1.3	<0.01	<0.01	<0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.1	4.0	<0.01
Source	0020_MW112	01 May 2017	F_MW02	ES1710866	0.0084	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Source	0020_MW112	18 Oct 2021	0020_MW112_211018	ES2138638	0.08	<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
Source	0020_MW112	04 Apr 2022	0020_MW112_220404	ES2212597	0.23	<0.02	0.07	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0020_MW112	10 Oct 2022	0020_MW112_221010	ES2237104	0.16	<0.02	0.08	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0020_MW112	17 Apr 2023	0020_MW112_230417	ES2313254	0.39	<0.02	0.14	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0020_MW112	16 Oct 2023	0020_MW112_ 231016	ES2336397	0.35	<0.02	0.12	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0020_MW112	08 Apr 2024	0020_MW112_240408	ES2411964	0.14	<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	<0.05
Source	0020_MW112	21 Oct 2024	0020_MW112_241021	ES2435143	0.33	<0.02	0.14	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0020_MW112	21 Oct 2024	0020_QC251_241021	1154740	0.28	<0.01	0.10	<0.01	<0.01	<0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.05	<0.01
Source	0020_MW112	31 Mar 2025	0020_MW112_250331	ES2510618	0.10	<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	<0.05
Source	0020_MW112	31 Mar 2025	0020_QC130_250331	ES2510618	0.09	<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	<0.05
Source	0020_MW112	31 Mar 2025	0020_QC230_250331	1209674	0.11	<0.01	0.06	<0.01	<0.01	<0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.05	<0.01
Source	0020_MW115	11 Aug 2020	0020_MW115_200811	ES2028287	0.87	<0.02	0.22	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0020_MW115	19 Oct 2021	0020_MW115_211019	ES2138638	0.94	<0.02	0.23	<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
Source	0020_MW115	04 Apr 2022	0020_MW115_220404	ES2212597	0.95	<0.02	0.29	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0020_MW115	10 Oct 2022	0020_MW115_221010	ES2237104	0.84	<0.02	0.33	<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
Source	0020_MW115	17 Apr 2023	0020_MW115_230417	ES2313254	0.09	<0.02	0.03	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0020_MW115	16 Oct 2023	0020_MW115_ 231016	ES2336397	0.24	<0.02	0.11	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0020_MW115	08 Apr 2024	0020_MW115_240408	ES2411964	<0.02	<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
Source	0020_MW115	22 Oct 2024	0020_MW115_241022	ES2435143	0.26	<0.02	0.17	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0020_MW115	31 Mar 2025	0020_MW115_250331	ES2510618	<0.02	<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
Source	0020_SW016	26 Oct 2017	E_Irrigation_03	ES1726858	0.0037	<0.0005	0.0026	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	0.018	<0.001
Source	0020_SW016	26 Oct 2017	TNQA301	569797	0.016[#3]	<0.001	0.004	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	0.021	<0.001
Source	0020_SW016	18 Oct 2021	0020_SW016_211018	ES2138638	0.07	<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
Source	0020_SW016	08 Apr 2022	0020_SW016_220408	ES2212597	0.09	<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
Source	0020_SW016	11 Oct 2022	0020_SW016_221011	ES2237104	0.06	<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
Source	0020_SW016	17 Apr 2023	0020_SW016_230417	ES2313254	0.07	<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
Source	0020_SW016	16 Oct 2023	0020_SW016_ 231016	ES2336397	0.03	<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
Source	0020_SW016	08 Apr 2024	0020_SW016_240408	ES2411964	0.05	<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
Source	0020_SW016	21 Oct 2024	0020_SW016_241021	ES2435143	0.03	<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
Source	0020_SW016	31 Mar 2025	0020_SW016_250331	ES2510618	0.03	<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
Source	0020_SW018	10 Apr 2017	E_SW01	ES1708884	0.0558	0.0013	0.0248	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.0022	<0.001	<0.001	0.003	<0.001
Source	0020_SW018	18 Oct 2021	0020_SW018_211018	ES2138638	0.06	<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
Source	0020_SW018	08 Apr 2022	0020_SW018_220408	ES2212597	0.08	<0.02	0.03	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0020_SW018	11 Oct 2022	0020_QC204_221011	308190	0.05	<0.01	<0.02	<0.5	<0.1	<0.02	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
Source	0020_SW018	11 Oct 2022	0020_SW018_221011	ES2237104	0.07	<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
Source	0020_SW018	17 Apr 2023	0020_SW018_230417	ES2313254	0.06	<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
Source	0020_SW018	16 Oct 2023	0020_SW018_ 231016	ES2336397	0.05	<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
Source	0020_SW018	08 Apr 2024	0020_SW018_240408	ES2411964	0.05	<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
Source	0020_SW018	21 Oct 2024	0020_QC152_241021	ES2435143	0.03	<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
Source	0020_SW018	21 Oct 2024	0020_SW018_241021	ES2435143	0.03	<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
Source	0020_SW018	31 Mar 2025	0020_QC150_250331	ES2510618	0.03	<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
Source	0020_SW018	31 Mar 2025	0020_SW018_250331	ES2510618	0.03	<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
Source	0021_MW025	27 Apr 2017	JCQA09	ES1710200	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Source	0021_MW025	27 Apr 2017	MW025	ES1710200	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Source	0021_MW025	14 Feb 2019	0021_MW025_190214	ES1905115	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	0.003	<0.001
Source	0021_MW025	14 Feb 2019	0021_QC209_190214	641508	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.005	<0.001
Source	0021_MW025	29 May 2019	0021_MW025_190529	ES1916831	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Source	0021_MW025	20 Oct 2021	0021_MW025_211020	ES2138639	<0.02	<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
Source	0021_MW025	06 Apr 2022	0021_MW025_220406	ES2212442	<0.02	<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
Source	0021_MW025	14 Oct 2022	0021_MW025_221014	ES2237106	<0.02	<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

					PFAS - Perfluoroalkyl Carboxylic Acids						PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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					0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 2025 Freshwater and Interim Marine 95%																					
PFAS NEMP 2025 Recreational water quality																					
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																	
Source	0021_MW025	21 Apr 2023	0021_MW025_230421	ES2313364	<0.02	<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
Source	0021_MW025	19 Oct 2023	0021_MW025_231019	ES2336398	<0.02	<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
Source	0021_MW025	12 Apr 2024	0021_MW025_240412	ES2411994	<0.02	<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
Source	0021_MW025	22 Oct 2024	0021_MW025_241022	ES2435078	<0.02	<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
Source	0021_MW025	02 Apr 2025	0021_MW025_250402	ES2510113	<0.02	<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
Source	0021_MW026	28 Apr 2017	MW026	ES1710200	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Source	0021_MW026	14 Feb 2019	0021_MW026_190214	ES1905115	0.0011	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	0.019	<0.001
Source	0021_MW026	14 Feb 2019	0021_QC110_190214	ES1905115	0.0011	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	0.016	<0.001
Source	0021_MW026	29 May 2019	0021_MW026_190529	ES1916831	0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	0.004	<0.001
Source	0021_MW026	20 Oct 2021	0021_MW026_211020	ES2138639	<0.02	<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
Source	0021_MW026	06 Apr 2022	0021_MW026_220406	ES2212442	<0.02	<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
Source	0021_MW026	14 Oct 2022	0021_MW026_221014	ES2237106	<0.02	<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
Source	0021_MW026	21 Apr 2023	0021_MW026_230421	ES2313364	<0.02	<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
Source	0021_MW026	19 Oct 2023	0021_MW026_231019	ES2336398	<0.02	<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
Source	0021_MW026	12 Apr 2024	0021_MW026_240412	ES2411994	<0.02	<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
Source	0021_MW026	22 Oct 2024	0021_MW026_241022	ES2435078	<0.02	<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
Source	0021_MW026	22 Oct 2024	0021_QC104_241022	ES2435078	<0.02	<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
Source	0021_MW026	22 Oct 2024	0021_QC204_241022	1154751	<0.01	<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	<0.01	<0.05	<0.01
Source	0021_MW026	07 Apr 2025	0021_MW026_250407	ES2510113	<0.02	<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
Source	0021_MW117	03 May 2017	C_MW01	ES1710866	0.0263	<0.0005	0.0104	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Source	0021_MW117	20 Oct 2021	0021_MW117_211020	ES2138639	<0.02	<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
Source	0021_MW117	20 Oct 2021	0021_QC203_211020	281322	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
Source	0021_MW117	14 Oct 2022	0021_MW117_221014	ES2237106	<0.02	<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
Source	0021_MW117	21 Apr 2023	0021_MW117_230421	ES2313364	<0.02	<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
Source	0021_MW117	19 Oct 2023	0021_MW117_231019	ES2336398	0.04	<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
Source	0021_MW117	12 Apr 2024	0021_MW117_240412	ES2411994	<0.02	<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
Source	0021_MW117	22 Oct 2024	0021_MW117_241022	ES2435078	<0.02	<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
Source	0021_MW117	02 Apr 2025	0021_MW117_250402	ES2510113	<0.02	<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
Source	0021_MW118	03 May 2017	C_MW02	ES1710866	0.0037	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Source	0021_MW118	26 Oct 2021	0021_MW118_211026	ES2138639	0.10	<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
Source	0021_MW118	11 Oct 2022	0021_MW118_221011	ES2237106	0.07	<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
Source	0021_MW118	03 Feb 2023	0021_MW118_230203	ES2303695	0.06	<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
Source	0021_MW118	21 Apr 2023	0021_MW118_230421	ES2313364	0.08	<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
Source	0021_MW118	19 Oct 2023	0021_MW118_231019	ES2336398	0.03	<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
Source	0021_MW118	12 Apr 2024	0021_MW118_240412	ES2411994	<0.02	<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
Source	0021_MW118	22 Oct 2024	0021_MW118_241022	ES2435078	0.03	<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
Source	0021_MW118	02 Apr 2025	0021_MW118_250402	ES2510113	<0.02	<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
Pathway	0020_MW001	08 May 2017	MW001	ES1711220	0.0019	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Pathway	0020_MW001	12 Apr 2022	0020_MW001_220412	ES2213152	<0.02	<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
Pathway	0020_MW001	10 Oct 2022	0020_MW001_221010	ES2236866	<0.02	<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
Pathway	0020_MW001	31 Jan 2023	0020_MW001_230131	ES2303447	<0.02	<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
Pathway	0020_MW001	31 Jan 2023	0020_QC201_230131	961653	<0.01	<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	<0.01	<0.05	<0.01
Pathway	0020_MW001	07 Apr 2025	0020_MW001_250407	ES2510618	<0.02	<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
Pathway	0020_MW007	11 Apr 2018	0020_MW007_180411	ES1810721	0.0156	0.0013	0.0083	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Pathway	0020_MW007	15 Oct 2021	0020_MW007_211015	ES2138638	<0.02	<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
Pathway	0020_MW007	15 Oct 2021	0020_QC100_211015	ES2138638	<0.02	<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
Pathway	0020_MW007	04 Apr 2022	0020_MW007_220404	ES2212597	<0.02	<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
Pathway	0020_MW007	10 Oct 2022	0020_MW007_221010	ES2237104	<0.02	<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
Pathway	0020_MW007	31 Jan 2023	0020_MW007_230131	ES2303447	<0.02	<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
Pathway	0020_MW007	17 Apr 2023	0020_MW007_230417	ES2313254	0.02	<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
Pathway	0020_MW007	16 Oct 2023	0020_MW007_ 231016	ES2336397	<0.02	<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
Pathway	0020_MW007	08 Apr 2024	0020_MW007_240408	ES2411964	<0.02	<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
Pathway	0020_MW007	07 Apr 2025	0020_MW007_250407	ES2510618	<0.02	<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
Pathway	0020_MW008	12 Apr 2022	0020_MW008_220412	ES2213152	<0.02	<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
Pathway	0020_MW008	10 Oct 2022	0020_MW008_221010	ES2236866	<0.02	<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
Pathway	0020_MW017	01 May 2017	MW017	ES1710866	0.0621	0.0012	0.0144	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Pathway	0020_MW017	15 Oct 2021	0020_MW017_211015	ES2138638	0.07	<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
Pathway	0020_MW017	04 Apr 2022	0020_MW017_220404	ES2212597	0.09	<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
Pathway	0020_MW017	11 Oct 2022	0020_MW017_221011	ES2237104	0.05	<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
Pathway	0020_MW017	01 Feb 2023	0020_MW017_230201	ES2303447	0.10	<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	<0.05
Pathway	0020_MW017	17 Apr 2023	0020_MW017_230417	ES2313254	0.11	<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	<0.05
Pathway	0020_MW017	17 Apr 2023	0020_QC104_230417	ES2313254	0.08	<0.02	0.03	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0020_MW017	17 Apr 2023	0020_QC204_230417	321518	0.09	<0.01	0.04	<0.5	<0.1	<0.02	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
Pathway	0020_MW017	16 Oct 2023	0020_MW017_ 231016	ES2336397	0.07	<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

					PFAS - Perfluoroalkyl Carboxylic Acids						PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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					0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 2025 Freshwater and Interim Marine 95%																					
PFAS NEMP 2025 Recreational water quality																					
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																	
Pathway	0020_MW017	08 Apr 2024	0020_MW017_240408	ES2411964	0.05	<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
Pathway	0020_MW017	21 Oct 2024	0020_MW017_241021	ES2435143	0.07	<0.02	0.03	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0020_MW017	31 Mar 2025	0020_MW017_250331	ES2510618	0.03	<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
Pathway	0020_MW068	10 Oct 2022	0020_MW068_221010	ES2236866	<0.02	<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
Pathway	0020_MW068	31 Jan 2023	0020_MW068_230131	ES2303447	<0.02	<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	0.07	<0.05
Pathway	0020_MW068	21 Oct 2024	0020_MW068_241021	ES2435143	<0.02	<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
Pathway	0020_MW068	01 Apr 2025	0020_MW068_250401	ES2510618	<0.02	<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
Pathway	0020_MW069	24 Apr 2025	0020_MW069_250424	ES2512752	<0.02	<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
Pathway	0020_MW070	24 Apr 2025	0020_MW070_250424	ES2512752	<0.02	<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
Pathway	0020_MW070	24 Apr 2025	0020_QC120_250424	ES2512752	<0.02	<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
Pathway	0020_MW108	01 May 2017	E_MW03	ES1710866	0.0107	<0.0005	0.0018	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Pathway	0020_MW108	13 Apr 2022	0020_MW108_220413	ES2213152	0.62	<0.02	0.28	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0020_MW108	10 Oct 2022	0020_MW108_221010	ES2236866	0.16	<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	<0.05
Pathway	0020_MW108	10 Oct 2022	0020_QC100_221010	ES2236866	0.14	<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	<0.05
Pathway	0020_MW108	10 Oct 2022	0020_QC200_221010	931497	0.13[#3]	<0.01	0.04[#3]	<0.01	<0.01	<0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.05	<0.01
Pathway	0020_MW108	31 Jan 2023	0020_MW108_230131	ES2303447	0.11	<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	<0.05
Pathway	0020_MW109	01 May 2017	E_MW04	ES1710866	0.0192	<0.0005	0.0037	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Pathway	0020_MW109	03 May 2018	E_MW04_180503	ES1812871	0.18	<0.02	0.03	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0020_MW109	15 Oct 2021	0020_MW109_211015	ES2138638	0.06	<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	0.17	<0.05
Pathway	0020_MW109	04 Apr 2022	0020_MW109_220404	ES2212597	0.12	<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
Pathway	0020_MW109	04 Apr 2022	0020_QC100_220404	ES2212597	0.12	<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
Pathway	0020_MW109	04 Apr 2022	0020_QC200_220404	293030	0.11	<0.01	0.02	<0.5	<0.1	<0.02	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
Pathway	0020_MW109	11 Oct 2022	0020_MW109_221011	ES2237104	0.14	<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	<0.05
Pathway	0020_MW109	31 Jan 2023	0020_MW109_230131	ES2303447	0.15	<0.02	0.07	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0020_MW109	31 Jan 2023	0020_QC101_230131	ES2303447	0.15	<0.02	0.07	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0020_MW109	17 Apr 2023	0020_MW109_230417	ES2313254	0.17	<0.02	0.05	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0020_MW109	16 Oct 2023	0020_MW109_ 231016	ES2336397	0.14	<0.02	0.05	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0020_MW109	08 Apr 2024	0020_MW109_240408	ES2411964	0.06	<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
Pathway	0020_MW109	08 Apr 2024	0020_QC100_240408	ES2411964	0.16	<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
Pathway	0020_MW109	08 Apr 2024	0020_QC200_240408	348827	0.14	<0.01	0.05	<0.5	<0.1	<0.02	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
Pathway	0020_MW109	21 Oct 2024	0020_MW109_241021	ES2435143	0.11	<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
Pathway	0020_MW109	31 Mar 2025	0020_MW109_250331	ES2510618	0.12	<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	<0.05
Pathway	0020_MW110	01 May 2017	E_MW05	ES1710866	0.0409	<0.0005	0.0251	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Pathway	0020_MW110	15 Oct 2021	0020_MW110_211015	ES2138638	0.45	<0.02	0.16	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	0.05	<0.05
Pathway	0020_MW110	04 Apr 2022	0020_MW110_220404	ES2212597	0.61	<0.02	0.40	<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
Pathway	0020_MW110	04 Apr 2022	0020_QC102_220404	ES2212597	0.59	<0.02	0.38	<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
Pathway	0020_MW110	04 Apr 2022	0020_QC202_220404	293030	0.56	<0.01	0.42	<0.5	<0.1	<0.02	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
Pathway	0020_MW110	11 Oct 2022	0020_MW110_221011	ES2237104	0.22	<0.02	0.69	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0020_MW110	31 Jan 2023	0020_MW110_230131	ES2303447	0.18	<0.02	0.77	<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
Pathway	0020_MW110	17 Apr 2023	0020_MW110_230417	ES2313254	0.16	<0.02	0.48	<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
Pathway	0020_MW110	16 Oct 2023	0020_MW110_ 231016	ES2336397	0.08	<0.02	0.16	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0020_MW110	08 Apr 2024	0020_MW110_240408	ES2411964	0.11	<0.02	0.20	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0020_MW110	21 Oct 2024	0020_MW110_241021	ES2435143	0.07	<0.02	0.33	<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
Pathway	0020_MW110	21 Oct 2024	0020_QC250_241021	1154740	0.08	<0.01	0.36	<0.01	<0.01	<0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.05	<0.01
Pathway	0020_MW110	31 Mar 2025	0020_MW110_250331	ES2510618	0.06	<0.02	0.10	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0020_MW111	01 May 2017	F_MW01	ES1710866	0.325	0.0016	0.572	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	0.144	<0.001
Pathway	0020_MW111	18 Oct 2021	0020_MW111_211018	ES2138638	0.76	0.04	1.22	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	0.31	<0.05
Pathway	0020_MW111	18 Oct 2021	0020_QC200_211018	281319	0.79	0.03	1.3	<0.5	<0.1	<0.02	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	0.35	<0.02
Pathway	0020_MW111	08 Apr 2022	0020_MW111_220408	ES2212597	0.38	<0.02	0.38	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	0.08	<0.05
Pathway	0020_MW111	10 Oct 2022	0020_MW111_221010	ES2237104	0.20	0.02	0.24	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	0.08	<0.05
Pathway	0020_MW111	17 Apr 2023	0020_MW111_230417	ES2313254	0.31	0.04	0.64	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	0.08	<0.05
Pathway	0020_MW111	08 Apr 2024	0020_MW111_240408	ES2411964	0.35	0.05	0.53	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	0.21	<0.05
Pathway	0020_MW111	22 Oct 2024	0020_MW111_241022	ES2435143	0.47	0.03	0.78	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	0.24	<0.05
Pathway	0020_MW111	03 Apr 2025	0020_MW111_250403	ES2510618	0.49	0.06	0.70	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	0.26	<0.05
Pathway	0020_SW022	10 Apr 2017	F_SW01	ES1708884	0.260	<0.0005	0.122	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.0143	<0.001	<0.001	0.039	0.001
Pathway	0020_SW022	18 Oct 2021	0020_SW022_211018	ES2138638	0.28	<0.02	0.10	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0020_SW022	13 Dec 2021	0020_SW022_211213	ES2145964	0.28	<0.02	0.12	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0020_SW022	04 Apr 2022	0020_SW022_220404	ES2212597	0.26	<0.02	0.08	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	0.20	<0.05
Pathway	0020_SW022	08 Jul 2022	0020_SW022_220708	ES2224472	0.17	<0.02	0.08	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	0.54	<0.05
Pathway	0020_SW022	10 Oct 2022	0020_SW022_221010	ES2237104	0.16	<0.02	0.06	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	0.51	<0.05
Pathway	0020_SW022	17 Apr 2023	0020_QC102_230417	ES2313254	0.25	<0.02	0.08	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0020_SW022	17 Apr 2023	0020_QC202_230417	321518	0.22	<0.01	0.08	<0.5	<0.1	<0.02	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	0.03	<0.02
Pathway	0020_SW022	18 Apr 2023	0020_SW022_230417	ES2313254	0.25	<0.02	0.08	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05

					PFAS - Perfluoroalkyl Carboxylic Acids						PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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					0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 2025 Freshwater and Interim Marine 95%																					
PFAS NEMP 2025 Recreational water quality																					
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																	
Pathway	0020_SW022	08 Apr 2024	0020_SW022_240408	ES2411964	0.11	<0.02	0.03	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0020_SW022	31 Mar 2025	0020_QC133_250331	ES2510618	0.03	<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
Pathway	0020_SW022	31 Mar 2025	0020_QC233_250331	1209674	0.03	<0.01	0.02	<0.01	<0.01	<0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.05	<0.01
Pathway	0020_SW022	31 Mar 2025	0020_SW022_250331	ES2510618	0.02	<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
Pathway	0020_SW023	10 Apr 2017	F_SW02	ES1708884	0.156	0.0079	0.134	<0.0005	<0.0005	0.0027	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.0600	0.002	<0.001	0.048	0.019
Pathway	0020_SW023	19 Oct 2021	0020_SW023_211019	ES2138638	0.05	<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	0.10	<0.05
Pathway	0020_SW023	13 Dec 2021	0020_SW023_211213	ES2145964	0.18	<0.02	0.08	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	0.17	<0.05
Pathway	0020_SW023	04 Apr 2022	0020_SW023_220404	ES2212597	0.43	<0.02	0.24	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	0.14	<0.05
Pathway	0020_SW023	08 Jul 2022	0020_SW023_220708	ES2224472	0.30	<0.02	0.18	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0020_SW023	10 Oct 2022	0020_SW023_221010	ES2237104	0.12	<0.02	0.08	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	0.10	<0.05
Pathway	0020_SW023	17 Apr 2023	0020_SW023_230417	ES2313254	0.07	<0.02	0.08	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0020_SW023	08 Apr 2024	0020_SW023_240408	ES2411964	0.16	<0.02	0.16	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	0.15	<0.05
Pathway	0020_SW023	31 Mar 2025	0020_SW023_250331	ES2510618	0.03	<0.02	0.03	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	0.08	<0.05
Pathway	0020_SW030	20 Apr 2017	FC_SW05	ES1709644	0.0034	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Pathway	0020_SW030	30 Apr 2018	FC_QC113_180430	ES1812871	<0.02	<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
Pathway	0020_SW030	30 Apr 2018	FC_SW05_180430	ES1812871	0.0054	<0.0020[#4]	<0.0020[#4]	<0.0050[#4]	<0.0020[#4]	<0.0020[#4]	<0.005[#4]	<0.0020[#4]	<0.005[#4]	<0.005[#4]	<0.0020[#4]	<0.005[#4]	<0.0020[#4]	<0.002[#4]	<0.002[#4]	<0.002[#4]	<0.002[#4]
Pathway	0020_SW030	19 Oct 2021	0020_QC204_211019	281319	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
Pathway	0020_SW030	19 Oct 2021	0020_SW030_211019	ES2138638	<0.02	<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
Pathway	0020_SW030	04 Apr 2022	0020_SW030_220404	ES2212597	<0.02	<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
Pathway	0020_SW030	12 Apr 2022	0020_SW030_220412	ES2213152	<0.02	<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
Pathway	0020_SW030	08 Jul 2022	0020_QC104_220708	ES2224472	<0.02	<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
Pathway	0020_SW030	08 Jul 2022	0020_QC204_220708	905319	<0.01	<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	<0.01	<0.05	<0.01
Pathway	0020_SW030	08 Jul 2022	0020_SW030_220708	ES2224472	<0.02	<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
Pathway	0020_SW030	12 Oct 2022	0020_SW030_221012	ES2236866	<0.02	<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
Pathway	0020_SW030	12 Oct 2022	0020_SW030_221012	ES2237104	<0.02	<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
Pathway	0020_SW030	01 Feb 2023	0020_SW030_230201	ES2303447	<0.02	<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
Pathway	0020_SW030	17 Apr 2023	0020_QC101_230417	ES2313254	<0.02	<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
Pathway	0020_SW030	17 Apr 2023	0020_QC201_230417	321518	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
Pathway	0020_SW030	17 Apr 2023	0020_SW030_230417	ES2313254	<0.02	<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
Pathway	0020_SW030	16 Oct 2023	0020_SW030_ 231016	ES2336397	<0.02	<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
Pathway	0020_SW030	08 Apr 2024	0020_SW030_240408	ES2411964	<0.02	<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
Pathway	0020_SW030	26 Oct 2024	0020_SW030_241026	ES2435539	<0.02	<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
Pathway	0020_SW030	31 Mar 2025	0020_SW030_250331	ES2510618	<0.02	<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
Pathway	0020_SW032	21 Mar 2018	FC_SW13_180321	ES1808818	0.0032	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Pathway	0020_SW032	19 Oct 2021	0020_QC104_211019	ES2138638	<0.02	<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
Pathway	0020_SW032	19 Oct 2021	0020_SW032_211019	ES2138638	<0.02	<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
Pathway	0020_SW032	04 Apr 2022	0020_SW032_220404	ES2212597	<0.02	<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
Pathway	0020_SW032	12 Oct 2022	0020_SW032_221012	ES2237104	<0.02	<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
Pathway	0020_SW032	17 Apr 2023	0020_SW032_230417	ES2313254	<0.02	<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
Pathway	0020_SW032	16 Oct 2023	0020_QC101_ 231016	ES2336397	<0.02	<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
Pathway	0020_SW032	16 Oct 2023	0020_QC201_231016	335710	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
Pathway	0020_SW032	16 Oct 2023	0020_SW032_ 231016	ES2336397	<0.02	<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
Pathway	0020_SW032	08 Apr 2024	0020_SW032_240408	ES2411964	<0.02	<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
Pathway	0020_SW032	31 Mar 2025	0020_QC152_250331	ES2510618	<0.02	<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
Pathway	0020_SW032	31 Mar 2025	0020_SW032_250331	ES2510618	<0.02	<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
Pathway	0020_SW054	12 Apr 2022	0020_SW054_220412	ES2213152	0.16	<0.02	0.05	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0020_SW054	07 Jul 2022	0020_SW054_220707	ES2224472	0.10	<0.02	0.03	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0020_SW054	12 Oct 2022	0020_QC126_221012	ES2236866	0.14	<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	<0.05
Pathway	0020_SW054	12 Oct 2022	0020_SW054_221012	ES2236866	0.15	<0.02	0.05	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0020_SW054	30 Jan 2023	0020_QC220_230130	961653	0.14[#3]	<0.01	0.06[#3]	<0.01	<0.01	<0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.05	<0.01
Pathway	0020_SW054	30 Jan 2023	0020_SW054_230130	ES2303447	0.13	<0.02	0.05	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0020_SW054	21 Oct 2024	0020_SW054_241021	ES2435143	0.16	<0.02	0.05	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_MW125	04 May 2017	FC_MW01	ES1711220	0.0065	<0.0005	0.0019	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	0.003	<0.001
Pathway	0021_MW125	03 May 2018	FC_MW01_180503	ES1812871	<0.02	<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
Pathway	0021_MW125	14 Feb 2019	FC_MW01_190214	ES1905115	0.0098	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	0.002	<0.001
Pathway	0021_MW125	29 May 2019	FC_MW01_190529	ES1916831	0.0149	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Pathway	0021_MW125	20 Oct 2021	0021_MW125_211020	ES2138639	<0.02	<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
Pathway	0021_MW125	20 Oct 2021	0021_QC207_211020	281322	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
Pathway	0021_MW125	07 Apr 2022	0021_MW125_220407	ES2212442	<0.02	<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
Pathway	0021_MW125	14 Oct 2022	0021_MW125_221014	ES2237106	<0.02	<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
Pathway	0021_MW125	02 Feb 2023	0021_MW125_230202	ES2303446	<0.02	<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
Pathway	0021_MW125	02 Feb 2023	0021_QC203_230202	961655	0.01	<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	<0.01	<0.05	<0.01
Pathway	0021_MW125	19 Apr 2023	0021_MW125_230419	ES2313364	<0.02	<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

					PFAS - Perfluoroalkyl Carboxylic Acids						PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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					0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 2025 Freshwater and Interim Marine 95%																					
PFAS NEMP 2025 Recreational water quality																					
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																	
Pathway	0021_MW125	19 Apr 2023	0021_QC104_230419	ES2313364	<0.02	<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
Pathway	0021_MW125	19 Apr 2023	0021_QC204_230419	321517	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
Pathway	0021_MW125	18 Oct 2023	0021_MW125_231018	ES2336398	<0.02	<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
Pathway	0021_MW125	10 Apr 2024	0021_MW125_240410	ES2411994	<0.02	<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
Pathway	0021_MW125	26 Oct 2024	0021_MW125_241026	ES2435541	<0.02	<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
Pathway	0021_MW126	04 May 2017	FC_MW02	ES1711220	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Pathway	0021_MW126	20 Oct 2021	0021_MW126_211020	ES2138639	<0.02	<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
Pathway	0021_MW126	20 Oct 2021	0021_QC108_211020	ES2138639	<0.02	<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
Pathway	0021_MW126	07 Apr 2022	0021_MW126_220407	ES2212442	<0.02	<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
Pathway	0021_MW126	07 Apr 2022	0021_QC209_220407	293031	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
Pathway	0021_MW126	13 Oct 2022	0021_MW126_221013	ES2237106	<0.02	<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
Pathway	0021_MW126	02 Feb 2023	0021_MW126_230202	ES2303446	<0.02	<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
Pathway	0021_MW126	19 Apr 2023	0021_MW126_230419	ES2313364	<0.02	<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
Pathway	0021_MW126	18 Oct 2023	0021_MW126_231018	ES2336398	<0.02	<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
Pathway	0021_MW126	18 Oct 2023	0021_QC105_231018	ES2336399	<0.02	<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
Pathway	0021_MW126	18 Oct 2023	0021_QC205_231018	335876	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
Pathway	0021_MW126	10 Apr 2024	0021_MW126_240410	ES2411994	<0.02	<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
Pathway	0021_MW126	26 Oct 2024	0021_MW126_241026	ES2435541	<0.02	<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
Pathway	0021_MW126	26 Oct 2024	0021_QC116_241026	ES2435541	<0.02	<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
Pathway	0021_MW126	26 Oct 2024	0021_QC216_241026	1156160	<0.01	<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	<0.01	<0.05	<0.01
Pathway	0021_MW126	01 Apr 2025	0021_MW126_250401	ES2510113	<0.02	<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
Pathway	0021_MW126	01 Apr 2025	0021_QC105_250401	ES2510113	<0.02	<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
Pathway	0021_MW126	01 Apr 2025	0021_QC205_250401	1210052	<0.01	<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	<0.01	<0.05	<0.01
Pathway	0021_MW128	04 May 2017	LM_MW01	ES1711220	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Pathway	0021_MW128	03 May 2018	LM_MW01_180503	ES1812871	0.13	<0.02	0.03	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_MW128	14 Feb 2019	LM_MW01_190214	ES1905115	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Pathway	0021_MW128	29 May 2019	0021_QC100_190529	ES1916831	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Pathway	0021_MW128	29 May 2019	LM_MW01_190529	ES1916831	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Pathway	0021_MW128	20 Oct 2021	0021_MW128_211020	ES2138639	<0.02	<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
Pathway	0021_MW128	20 Oct 2021	0021_QC107_211020	ES2138639	<0.02	<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
Pathway	0021_MW128	21 Dec 2021	0021_MW128_211221	ES2147061	<0.02	<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
Pathway	0021_MW128	21 Dec 2021	0021_QC112_211221	ES2147061	<0.02	<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
Pathway	0021_MW128	21 Dec 2021	0021_QC212_211221	853283	<0.01	<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	<0.01	<0.05	<0.01
Pathway	0021_MW128	06 Apr 2022	0021_MW128_220406	ES2212442	<0.02	<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
Pathway	0021_MW128	14 Oct 2022	0021_MW128_221014	ES2237106	<0.02	<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
Pathway	0021_MW128	01 Feb 2023	0021_MW128_230201	ES2303446	<0.02	<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
Pathway	0021_MW128	19 Apr 2023	0021_MW128_230419	ES2313364	<0.02	<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
Pathway	0021_MW128	18 Oct 2023	0021_MW128_231018	ES2336398	<0.02	<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
Pathway	0021_MW128	10 Apr 2024	0021_MW128_240410	ES2411994	<0.02	<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
Pathway	0021_MW128	10 Apr 2024	0021_QC104_240410	ES2411994	<0.02	<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
Pathway	0021_MW128	10 Apr 2024	0021_QC204_240410	348825	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
Pathway	0021_MW128	23 Oct 2024	0021_MW128_241023	ES2435078	<0.02	<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
Pathway	0021_MW128	02 Apr 2025	0021_MW128_250402	ES2510113	<0.02	<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
Pathway	0021_MW128	02 Apr 2025	0021_QC155_250402	ES2510113	<0.02	<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
Pathway	0021_MW160	21 Dec 2021	0021_MW160_211221	ES2147061	<0.02	<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
Pathway	0021_MW160	23 Oct 2024	0021_MW160_241023	ES2435078	<0.02	<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
Pathway	0021_MW160	23 Oct 2024	0021_QC105_241023	ES2435078	<0.02	<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
Pathway	0021_MW160	23 Oct 2024	0021_QC205_241023	1154751	<0.01	<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	<0.01	<0.05	<0.01
Pathway	0021_MW160	02 Apr 2025	0021_MW160_250402	ES2510113	<0.02	<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
Pathway	0021_MW160	02 Apr 2025	0021_QC254_250402	1210052	<0.01	<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	<0.01	<0.05	<0.01
Pathway	0021_MW163	11 Apr 2022	0021_MW163_220411	ES2213156	0.21	<0.02	0.05	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_MW163	11 Oct 2022	0021_MW163_221011	ES2236834	0.17	<0.02	0.06	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_MW163	02 Feb 2023	0021_MW163_230202	ES2303446	0.11	<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	<0.05
Pathway	0021_MW163	02 Feb 2023	0021_QC103_230202	ES2303446	0.09	<0.02	0.03	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_MW163	23 Oct 2024	0021_MW163_241023	ES2435078	0.03	<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
Pathway	0021_MW163	02 Apr 2025	0021_MW163_250402	ES2510113	<0.02	<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
Pathway	0021_MW164	11 Apr 2022	0021_MW164_220411	ES2213156	0.32	<0.02	0.06	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_MW164	11 Apr 2022	0021_QC100_220411	ES2213156	0.31	<0.02	0.06	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_MW164	11 Oct 2022	0021_MW164_221011	ES2236834	0.27	<0.02	0.06	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_MW164	11 Oct 2022	0021_QC125_221011	ES2236834	0.24	<0.02	0.05	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_MW164	03 Feb 2023	0021_MW164_230203	ES2303695	0.06	<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
Pathway	0021_MW164	22 Oct 2024	0021_MW164_241022	ES2435078	0.02	<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
Pathway	0021_MW164	02 Apr 2025	0021_MW164_250402	ES2510113	<0.02	<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

					PFAS - Perfluoroalkyl Carboxylic Acids						PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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					0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 2025 Freshwater and Interim Marine 95%																					
PFAS NEMP 2025 Recreational water quality																					
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																	
Pathway	0021_SW020	13 Apr 2017	DC_SW05	ES1709064	0.0391	<0.0005	0.0044	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.0006	<0.001	<0.001	<0.001	<0.001
Pathway	0021_SW020	20 Oct 2021	0021_SW020_211020	ES2138639	0.03	<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
Pathway	0021_SW020	06 Apr 2022	0021_SW020_220406	ES2212442	<0.02	<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
Pathway	0021_SW020	07 Jul 2022	0021_SW020_220707	ES2224473	<0.02	<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
Pathway	0021_SW020	14 Oct 2022	0021_SW020_221014	ES2237106	0.08	<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
Pathway	0021_SW020	03 Feb 2023	0021_QC205_230203	961542	0.08	<0.01	0.03	<0.01	<0.01	<0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.05	<0.01
Pathway	0021_SW020	03 Feb 2023	0021_SW020_230203	ES2303695	0.08	<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
Pathway	0021_SW020	21 Apr 2023	0021_SW020_230421	ES2313364	0.12	<0.02	0.03	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_SW020	12 Apr 2024	0021_SW020_240412	ES2412012	0.03	<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
Pathway	0021_SW020	22 Oct 2024	0021_SW020_241022	ES2435078	0.09	<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
Pathway	0021_SW020	02 Apr 2025	0021_SW020_250402	ES2510622	<0.02	<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
Pathway	0021_SW022	19 Apr 2017	FC_SW06	ES1709535	0.0088	<0.0005	0.0033	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Pathway	0021_SW022	20 Oct 2021	0021_QC208_211020	281322	0.08	<0.01	<0.02	<0.5	<0.1	<0.02	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
Pathway	0021_SW022	20 Oct 2021	0021_SW022_211020	ES2138639	0.11	<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
Pathway	0021_SW022	07 Apr 2022	0021_SW022_220407	ES2212442	<0.02	<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
Pathway	0021_SW022	12 Oct 2022	0021_SW022_221012	ES2237106	0.08	<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
Pathway	0021_SW022	19 Apr 2023	0021_SW022_230419	ES2313364	0.09	<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
Pathway	0021_SW022	18 Oct 2023	0021_SW022_231018	ES2336399	0.03	<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
Pathway	0021_SW022	10 Apr 2024	0021_SW022_240410	ES2412012	0.05	<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
Pathway	0021_SW022	26 Oct 2024	0021_SW022_241026	ES2435541	<0.02	<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
Pathway	0021_SW022	03 Apr 2025	0021_SW022_250403	ES2510622	<0.02	<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
Pathway	0021_SW024	19 Apr 2017	FC_SW08	ES1709535	0.0023	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Pathway	0021_SW024	19 Apr 2017	JCQA03	ES1709535	0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Pathway	0021_SW024	20 Oct 2021	0021_SW024_211020	ES2138639	<0.02	<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
Pathway	0021_SW024	07 Apr 2022	0021_SW024_220407	ES2212442	<0.02	<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
Pathway	0021_SW024	13 Oct 2022	0021_SW024_221013	ES2237106	<0.02	<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
Pathway	0021_SW024	19 Apr 2023	0021_SW024_230419	ES2313364	<0.02	<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
Pathway	0021_SW024	10 Apr 2024	0021_SW024_240410	ES2412012	<0.02	<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
Pathway	0021_SW024	03 Apr 2025	0021_SW024_250403	ES2510622	<0.02	<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
Pathway	0021_SW025	20 Apr 2017	FC_SW09	ES1709644	0.0019	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Pathway	0021_SW025	26 Oct 2021	0021_SW025_211026	ES2138639	<0.02	<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
Pathway	0021_SW025	07 Apr 2022	0021_SW025_220407	ES2212442	<0.02	<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
Pathway	0021_SW025	13 Oct 2022	0021_SW025_221013	ES2237106	0.02	<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
Pathway	0021_SW025	19 Apr 2023	0021_SW025_230419	ES2313364	<0.02	<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
Pathway	0021_SW025	10 Apr 2024	0021_SW025_240410	ES2412012	<0.02	<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
Pathway	0021_SW025	04 Apr 2025	0021_SW025_250404	ES2510622	<0.02	<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
Receptor	0020_SW026	19 Apr 2017	FC_SW01	ES1709535	0.0038	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Receptor	0020_SW026	15 May 2018	FC_QC216_180515	599245	<0.01	<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	<0.01	<0.05	<0.01
Receptor	0020_SW026	15 May 2018	FC_SW01_180515	ES1814324	0.0026	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Receptor	0020_SW026	19 Oct 2021	0020_SW026_211019	ES2138638	<0.02	<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
Receptor	0020_SW026	04 Apr 2022	0020_QC203_220404	293030	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
Receptor	0020_SW026	04 Apr 2022	0020_SW026_220404	ES2212597	<0.02	<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
Receptor	0020_SW026	07 Jul 2022	0020_QC103_220707	ES2224472	<0.02	<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
Receptor	0020_SW026	07 Jul 2022	0020_QC203_220707	905319	<0.01	<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	<0.01	<0.05	<0.01
Receptor	0020_SW026	07 Jul 2022	0020_SW026_220707	ES2224472	<0.02	<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
Receptor	0020_SW026	10 Oct 2022	0020_SW026_221010	ES2237104	<0.02	<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
Receptor	0020_SW026	30 Jan 2023	0020_SW026_230130	ES2303447	0.02	<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
Receptor	0020_SW026	17 Apr 2023	0020_SW026_230417	ES2313254	<0.02	<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
Receptor	0020_SW026	16 Oct 2023	0020_SW026_ 231016	ES2336397	<0.02	<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
Receptor	0020_SW026	08 Apr 2024	0020_SW026_240408	ES2411964	<0.02	<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
Receptor	0020_SW026	25 Oct 2024	0020_QC112_241025	ES2435539	<0.02	<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
Receptor	0020_SW026	25 Oct 2024	0020_QC212_241025	1156671	<0.01	<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	<0.01	<0.05	<0.01
Receptor	0020_SW026	25 Oct 2024	0020_SW026_241025	ES2435539	<0.02	<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
Receptor	0020_SW026	01 Apr 2025	0020_QC251_250401	1209674	<0.01	<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	<0.01	<0.05	<0.01
Receptor	0020_SW026	01 Apr 2025	0020_SW026_250401	ES2510618	<0.02	<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
Receptor	0020_SW027	19 Apr 2017	FC_SW02	ES1709535	0.0039	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Receptor	0020_SW027	15 May 2018	FC_SW02_180515	ES1814324	0.0035	<0.0005	0.0009	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Receptor	0020_SW027	19 Oct 2021	0020_SW027_211019	ES2138638	<0.02	<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
Receptor	0020_SW027	04 Apr 2022	0020_QC103_220404	ES2212597	<0.02	<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
Receptor	0020_SW027	04 Apr 2022	0020_SW027_220404	ES2212597	<0.02	<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
Receptor	0020_SW027	07 Jul 2022	0020_SW027_220707	ES2224472	<0.02	<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
Receptor	0020_SW027	10 Oct 2022	0020_SW027_221010	ES2237104	<0.02	<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
Receptor	0020_SW027	30 Jan 2023	0020_SW027_230130	ES2303447	0.03	<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

					FAS - Perfluoroalkyl Carboxylic Acids						PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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					0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 2025 Freshwater and Interim Marine 95%																					
PFAS NEMP 2025 Recreational water quality																					
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																	
Receptor	0020_SW027	17 Apr 2023	0020_SW027_230417	ES2313254	0.02	<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
Receptor	0020_SW027	16 Oct 2023	0020_SW027_ 231016	ES2336397	<0.02	<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
Receptor	0020_SW027	08 Apr 2024	0020_SW027_240408	ES2411964	<0.02	<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
Receptor	0020_SW027	25 Oct 2024	0020_SW027_241025	ES2435539	<0.02	<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
Receptor	0020_SW027	01 Apr 2025	0020_QC250_250401	1209674	<0.01	<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	<0.01	<0.05	<0.01
Receptor	0020_SW027	01 Apr 2025	0020_SW027_250401	ES2510618	<0.02	<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
Receptor	0020_SW029	19 Apr 2017	FC_SW04	ES1709535	0.0037	<0.0005	0.0016	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Receptor	0020_SW029	15 May 2018	FC_SW04_180515	ES1814324	0.0077	<0.0005	0.0013	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Receptor	0020_SW029	18 Oct 2021	0020_SW029_211018	ES2138638	<0.02	<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
Receptor	0020_SW029	04 Apr 2022	0020_QC104_220404	ES2212597	<0.02	<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
Receptor	0020_SW029	04 Apr 2022	0020_QC204_220404	293030	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
Receptor	0020_SW029	04 Apr 2022	0020_SW029_220404	ES2212597	<0.02	<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
Receptor	0020_SW029	10 Oct 2022	0020_SW029_221011	ES2237104	<0.02	<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
Receptor	0020_SW029	17 Apr 2023	0020_SW029_230417	ES2313254	<0.02	<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
Receptor	0020_SW029	16 Oct 2023	0020_SW029_ 231016	ES2336397	<0.02	<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
Receptor	0020_SW029	08 Apr 2024	0020_SW029_240408	ES2411964	<0.02	<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
Receptor	0020_SW029	21 Oct 2024	0020_QC151_241021	ES2435143	<0.02	<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
Receptor	0020_SW029	21 Oct 2024	0020_SW029_241021	ES2435143	<0.02	<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
Receptor	0020_SW029	31 Mar 2025	0020_SW029_250331	ES2510618	<0.02	<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
Receptor	0020_SW033	06 Apr 2018	FC_SW14_180406	ES1810551	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Receptor	0020_SW033	15 May 2018	FC_SW14_180515	ES1814324	0.0018	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Receptor	0020_SW033	19 Oct 2021	0020_SW033_211019	ES2138638	<0.02	<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
Receptor	0020_SW033	04 Apr 2022	0020_SW033_220404	ES2212597	<0.02	<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
Receptor	0020_SW033	10 Oct 2022	0020_SW033_221010	ES2237104	<0.02	<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
Receptor	0020_SW033	17 Apr 2023	0020_SW033_230417	ES2313254	<0.02	<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
Receptor	0020_SW033	16 Oct 2023	0020_SW033_ 231016	ES2336397	<0.02	<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
Receptor	0020_SW033	08 Apr 2024	0020_SW033_240408	ES2411964	<0.02	<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
Receptor	0020_SW033	25 Oct 2024	0020_SW033_241025	ES2435539	<0.02	<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
Receptor	0020_SW033	01 Apr 2025	0020_SW033_250401	ES2510618	<0.02	<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

	PFAS - Perfluoroalkyl Carboxylic Acids						PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
	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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 2025 Freshwater and Interim Marine 95%																	
PFAS NEMP 2025 Recreational water quality																	
Statistics																	
Number of Results	408	408	408	408	408	408	408	408	408	408	408	408	408	408	408	408	408
Number of Detects	202	12	135	0	0	1	0	0	0	0	0	0	4	1	2	44	2
Minimum Concentration	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	0.001
Minimum Detect	0.0005	0.0012	0.0006	ND	ND	0.0027	ND	ND	ND	ND	ND	ND	0.0006	0.002	0.05	0.002	0.001
Maximum Concentration	3.85	0.06	2.84	<0.5	<0.1	<0.02	<0.1	<0.05	<0.5	<0.05	<0.05	<0.05	<0.1	<0.05	<0.1	8.39	<0.05
Maximum Detect	3.85	0.06	2.84	ND	ND	0.0027	ND	ND	ND	ND	ND	ND	0.06	0.002	0.06	8.39	0.019
Average Concentration *	0.13	0.0089	0.089	0.031	0.01	0.0086	0.023	0.0097	0.033	0.022	0.0097	0.022	0.012	0.02	0.02	0.12	0.02
Geometric Average *	0.024	0.0063	0.014	0.015	0.0067	0.0063	0.016	0.0068	0.018	0.016	0.0068	0.016	0.0076	0.014	0.013	0.02	0.014
Median Concentration *	0.01	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 *	0.41	0.0054	0.3	0.049	0.0093	0.0033	0.0099	0.0048	0.049	0.0079	0.0048	0.0079	0.01	0.009	0.0098	0.65	0.009
Geometric Standard Deviation *	5.8	3.2	5.6	5	3.5	3.2	3.6	3.4	4	3.5	3.4	3.5	3.5	3.6	3.7	4.4	3.6
95% UCL (Student's-t) *	0.166	0.0093	0.113	0.0354	0.0112	0.00883	0.024	0.01	0.0365	0.0227	0.01	0.0227	0.0125	0.021	0.0211	0.172	0.0211
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	50	3	33	0	0	0	0	0	0	0	0	0	1	0	0	11	0
% of Non-Detects	50	97	67	100	100	100	100	100	100	100	100	100	99	100	100	89	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 Refer to Table 8 in PFAS NEMP 2025 for comments and notes
#2 Refer to Table 4 in PFAS NEMP 3.0 (2025) for comments and notes
#3 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.
#4 Reported Analyte LOR is higher than Requested Analyte LOR

Environmental Standards

HEPA, March 2025, PFAS NEMP 2025 Freshwater and Interim Marine 95%
HEPA, March 2025, PFAS NEMP 2025 Recreational water quality

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids						PFAS - Perfluoroalk				
					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)	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	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	0.001	0.0005	0.002	0.0005	0.0005	0.0004	0.0004
0020_0021_Human health consumption of biota					**0.01**	**0.01**					**0.01**												
PFAS NEMP 2025 Freshwater and Interim Marine 95%					0.13		220																
PFAS NEMP 2025 Drinking water quality					0.07[#1]	0.07[#1]	0.56[#1]				0.07[#1]												
PFAS NEMP 2025 Recreational water quality					2	2	10				2												
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																			
Pathway	0021_MW129	13 Apr 2018	LM_MW02_180413	ES1810721	0.0014	0.0018	<0.0005	0.0032	0.0032	-	0.0032	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
			LM_MW02_PRE_180413	ES1810721	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	-	<0.0003	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		03 May 2018	LM_MW02_180503	ES1812871	<0.01	<0.02	<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
		13 Feb 2019	LM_MW02_190213	ES1905115	0.0006	<0.0005	<0.0005	0.0036	0.0036	-	0.0006	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		31 May 2019	LM_MW02_190531	ES1916831	0.0048	<0.0005	0.0006	0.0353	0.0353	-	0.0048	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	0.0009
		22 Oct 2021	0021_MW129_211022	ES2138639	<0.0002	<0.0005	<0.0005	0.0050	0.0050	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
		06 Apr 2022	0021_MW129_220406	ES2212442	<0.0002	0.0017	<0.0005	0.0037	0.0037	-	0.0017	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
		10 Oct 2022	0021_MW129_221010	ES2237106	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
		18 Apr 2023	0021_MW129_230418	ES2313364	0.0005	<0.0005	<0.0005	0.0005	0.0005	-	0.0005	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
		17 Oct 2023	0021_MW129_231017	ES2336398	0.0003	<0.0005	<0.0005	0.0003	0.0003	-	0.0003	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
		09 Apr 2024	0021_MW129_240409	ES2411994	0.0066	0.0026	<0.0005	0.0103	0.0103	-	0.0092	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	0.0011
		26 Oct 2024	0021_MW129_241026	ES2435541	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	-	<0.0003	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		04 Apr 2025	0021_MW129_250404	ES2510113	0.0008	<0.0005	<0.0005	0.0008	0.0008	-	0.0008	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
	0021_MW130	12 Apr 2018	LW_MW01_180412	ES1810721	0.0026	0.0016	<0.0005	0.0042	0.0042	-	0.0042	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		15 May 2018	LW_MW01_180515	ES1814324	<0.01	<0.02	<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
		13 Feb 2019	LW_MW01_190213	ES1905115	0.0004	<0.0005	<0.0005	0.0024	0.0024	-	0.0004	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		30 May 2019	LW_MW01_190530	ES1916831	<0.0003	<0.0005	<0.0005	0.0040	0.0040	-	<0.0003	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		21 Oct 2021	0021_MW130_211021	ES2138639	<0.01	<0.01	<0.01	0.07	0.07	-	<0.01	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02
		06 Apr 2022	0021_MW130_220406	ES2212442	0.0002	<0.0005	<0.0005	0.0022	0.0022	-	0.0002	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
			0021_QC105_220406	ES2212442	0.0002	<0.0005	<0.0005	0.0022	0.0022	-	0.0002	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
		10 Oct 2022	0021_MW130_221010	ES2237106	0.0005	<0.0005	<0.0005	0.0005	0.0005	-	0.0005	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
		18 Apr 2023	0021_MW130_230418	ES2313364	0.0003	<0.0005	<0.0005	0.0003	0.0003	-	0.0003	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
		17 Oct 2023	0021_MW130_231017	ES2336398	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
		09 Apr 2024	0021_MW130_240409	ES2411994	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
		26 Oct 2024	0021_MW130_241026	ES2435541	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	-	<0.0003	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		04 Apr 2025	0021_MW130_250404	ES2510113	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	-	<0.0003	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
	0021_MW135	30 May 2019	LM_MW03A_190530	ES1916831	0.0010	<0.0005	<0.0005	0.0010	0.0010	-	0.0010	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		21 Oct 2021	0021_MW135_211021	ES2138639	<0.0002	<0.0005	<0.0005	0.0140	0.0140	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
			0021_QC112_211021	ES2138639	<0.0002	<0.0005	<0.0005	0.0140	0.0140	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
		06 Apr 2022	0021_MW135_220406	ES2212442	<0.0002	<0.0005	<0.0005	0.0050	0.0050	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
		10 Oct 2022	0021_MW135_221010	ES2237106	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
		18 Apr 2023	0021_MW135_230418	ES2313364	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
		17 Oct 2023	0021_MW135_231017	ES2336398	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
			0021_QC103_231017	ES2336399	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
			0021_QC203_231017	335876	0.0003	0.0002	0.0002	0.001	-	0.0005	0.0005	-	<0.0004	<0.002	-	<0.001	-	<0.001	<0.01	<0.002	<0.005	<0.0004	<0.0004
		09 Apr 2024	0021_MW135_240409	ES2411994	0.0056	<0.0005	0.0020	0.0085	0.0076	-	0.0056	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
		26 Oct 2024	0021_MW135_241026	ES2435541	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	-	<0.0003	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		04 Apr 2025	0021_MW135_250404	ES2510113	0.0020	<0.0005	<0.0005	0.0180	0.0180	-	0.0020	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
	0021_MW136	30 May 2019	LM_MW03B_190530	ES1916831	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	-	<0.0003	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		21 Oct 2021	0021_MW136_211021	ES2138639	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
		06 Apr 2022	0021_MW136_220406	ES2212442	0.0003	<0.0005	0.0010	0.0139	0.0139	-	0.0003	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	0.0006
		10 Oct 2022	0021_MW136_221010	ES2237106	0.0015	<0.0005	<0.0005	0.0015	0.0015	-	0.0015	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
		18 Apr 2023	0021_MW136_230418	ES2313364	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
		17 Oct 2023	0021_MW136_231017	ES2336398	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
		09 Apr 2024	0021_MW136_240409	ES2411994	<0.0002	<0.0005	<0.0005	0.0033	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
		26 Oct 2024	0021_MW136_241026	ES2435541	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	-	<0.0003	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
			0021_QC120_241026	ES2435541	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	-	<0.0003	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
			0021_QC220_241026	ES2435541	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	-	<0.0003	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		04 Apr 2025	0021_MW136_250404	ES2510113	0.0006	<0.0005	<0.0005	0.0006	0.0006	-	0.0006	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids						PFAS - Perfluoroalk				
					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)	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	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	0.001	0.0005	0.002	0.0005	0.0005	0.0004	0.0004
0020_0021_Human health consumption of biota					**0.01**	**0.01**					**0.01**												
PFAS NEMP 2025 Freshwater and Interim Marine 95%					0.13		220																
PFAS NEMP 2025 Drinking water quality					0.07[#1]	0.07[#1]	0.56[#1]				0.07[#1]												
PFAS NEMP 2025 Recreational water quality					2	2	10				2												
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																			
Pathway	0021_MW137	30 May 2019	0021_QC201_190530	660059	<0.0001	<0.001	<0.001	<0.1	<0.05	<0.01	<0.01	<0.01	<0.001	<0.001	-	<0.001	-	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001
			LM_MW03C_190530	ES1916831	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	-	<0.0003	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		21 Oct 2021	0021_MW137_211021	ES2138639	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
			0021_QC212_211021	281322	0.0003	<0.0002	<0.0002	0.0003	-	0.0003	0.0003	-	<0.0004	<0.002	-	<0.001	-	<0.001	<0.02	<0.002	<0.005	<0.0004	<0.0004
		06 Apr 2022	0021_MW137_220406	ES2212442	0.0002	<0.0005	<0.0005	0.0002	0.0002	-	0.0002	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
		10 Oct 2022	0021_MW137_221010	ES2237106	0.0013	0.0008	<0.0005	0.0021	0.0021	-	0.0021	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
		18 Apr 2023	0021_MW137_230418	ES2313364	<0.0002	<0.0005	<0.0005	0.0012	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
		17 Oct 2023	0021_MW137_231017	ES2336398	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
		09 Apr 2024	0021_MW137_240409	ES2411994	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
		26 Oct 2024	0021_MW137_241026	ES2435541	0.0030	0.0005	0.0005	0.0040	0.0040	-	0.0035	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		04 Apr 2025	0021_MW137_250404	ES2510113	**0.0129**	0.0061	<0.0005	0.0209	0.0202	-	**0.0190**	-	0.0012	<0.0005	-	<0.0005	-	0.0007	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
	0021_MW138	30 May 2019	LW_MW02A_190530	ES1916831	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	-	<0.0003	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		21 Oct 2021	0021_MW138_211021	ES2138639	<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
		05 Apr 2022	0021_MW138_220405	ES2212442	0.0006	<0.0005	<0.0005	0.0222	0.0222	-	0.0006	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	0.0006	<0.0005
			0021_QC200_220405	293031	0.0007	<0.0002	<0.0002	0.039	-	0.0007	0.0007	-	<0.0004	<0.002	-	<0.001	-	<0.001	<0.002	<0.002	<0.005	0.001	<0.0004
		10 Oct 2022	0021_MW138_221010	ES2237106	<0.0002	<0.0005	<0.0005	0.0110	0.0110	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
			0021_QC200_221010	308187	<0.01	<0.01	<0.01	0.03	-	<0.01	<0.01	-	<0.01	<0.02	-	<0.01	-	<0.01	<0.02	<0.02	<0.05	<0.01	<0.01
		18 Apr 2023	0021_MW138_230418	ES2313364	<0.0002	<0.0005	<0.0005	0.0140	0.0140	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
		17 Oct 2023	0021_MW138_231017	ES2336398	<0.0002	<0.0005	<0.0005	0.0127	0.0127	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	0.0007
		09 Apr 2024	0021_MW138_240409	ES2411994	<0.0002	<0.0005	<0.0005	0.0115	0.0115	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	0.0006	0.0009
		26 Oct 2024	0021_MW138_241026	ES2435541	0.0010	<0.0005	0.0062	0.0664	0.0664	-	0.0010	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	0.003	<0.0005	<0.0005	0.0036	0.0176
		03 Apr 2025	0021_MW138_250403	ES2510113	<0.0003	<0.0005	<0.0005	0.0090	0.0090	-	<0.0003	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
	0021_MW139	30 May 2019	LW_MW02B_190530	ES1916831	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	-	<0.0003	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		21 Oct 2021	0021_MW139_211021	ES2138639	<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
		05 Apr 2022	0021_MW139_220405	ES2212442	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
			0021_QC100_220405	ES2212442	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
		10 Oct 2022	0021_MW139_221010	ES2237106	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
		18 Apr 2023	0021_MW139_230418	ES2313364	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
			0021_QC100_230418	ES2313364	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
			0021_QC200_230418	321517	0.0003	<0.0002	<0.0002	0.0002	-	0.0002	0.0002	-	<0.0004	<0.002	-	<0.001	-	<0.001	<0.02	<0.002	<0.005	<0.0004	<0.0004
		17 Oct 2023	0021_MW139_231017	ES2336398	0.0009	<0.0005	0.0008	0.0028	0.0028	-	0.0009	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	0.0011
		09 Apr 2024	0021_MW139_240409	ES2411994	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
			0021_QC100_240409	ES2411994	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
			0021_QC200_240409	348825	<0.0002	<0.0002	<0.0002	<0.0002	-	<0.0002	<0.0002	-	<0.0004	<0.002	-	<0.001	-	<0.001	<0.002	<0.002	<0.005	<0.0004	<0.0004
		26 Oct 2024	0021_MW139_241026	ES2435541	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	-	<0.0003	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		03 Apr 2025	0021_MW139_250403	ES2510113	0.0004	<0.0005	<0.0005	0.0004	0.0004	-	0.0004	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
			0021_QC108_250403	ES2510113	0.0004	<0.0005	<0.0005	0.0004	0.0004	-	0.0004	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
			0021_QC208_250403	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	<0.001	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001
	0021_MW140	30 May 2019	LW_MW02C_190530	ES1916831	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	-	<0.0003	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		21 Oct 2021	0021_MW140_211021	ES2138639	<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
		05 Apr 2022	0021_MW140_220405	ES2212442	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
		10 Oct 2022	0021_MW140_221010	ES2237106	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
		18 Apr 2023	0021_MW140_230418	ES2313364	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
		17 Oct 2023	0021_MW140_231017	ES2336398	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
		09 Apr 2024	0021_MW140_240409	ES2411994	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
		26 Oct 2024	0021_MW140_241026	ES2435541	0.0007	<0.0005	<0.0005	0.0007	0.0007	-	0.0007	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		03 Apr 2025	0021_MW140_250403	ES2510113	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	-	<0.0003	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
	0021_SW035	27 Jul 2017	LM_SW04	ES1718711	0.0007	0.0007	<0.0005	0.0014	0.0014	-	0.0014	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		25 Aug 2017	LM_SW04	ES1721233	<0.01	<0.02	<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
			TNQA101	ES1721233	<0.01	<0.02	<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

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids						PFAS - Perfluoroalk				
					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)	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	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	0.001	0.0005	0.002	0.0005	0.0005	0.0004	0.0004
0020_0021_Human health consumption of biota					**0.01**	**0.01**					**0.01**												
PFAS NEMP 2025 Freshwater and Interim Marine 95%					0.13		220																
PFAS NEMP 2025 Drinking water quality					0.07[#1]	0.07[#1]	0.56[#1]				0.07[#1]												
PFAS NEMP 2025 Recreational water quality					2	2	10				2												
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																			
Pathway	0021_SW035	11 Feb 2019	LM_SW04_190211	ES1904669	0.0016	0.0011	<0.0005	0.0027	0.0027	-	0.0027	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		18 Mar 2019	LM_QC101_190318	ES1908940	0.0026	0.0024	<0.0020[#4]	0.0258	0.0258	-	0.0050	-	<0.0020[#4]	<0.0020[#4]	-	<0.0020[#4]	-	<0.0020[#4]	<0.002	<0.0020[#4]	<0.0020[#4]	<0.0020[#4]	<0.0020[#4]
			LM_SW04_190318	ES1908940	0.0030	0.0024	<0.0020[#4]	0.0262	0.0262	-	0.0054	-	<0.0020[#4]	<0.0020[#4]	-	<0.0020[#4]	-	<0.0020[#4]	<0.002	<0.0020[#4]	<0.0020[#4]	<0.0020[#4]	<0.0020[#4]
		22 Oct 2021	0021_SW035_211022	ES2138639	<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
		05 Apr 2022	0021_SW035_220405	ES2212442	<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
		10 Oct 2022	0021_SW035_221010	ES2237106	<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
		18 Apr 2023	0021_SW035_230418	ES2313364	<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
		10 Apr 2024	0021_SW035_240410	ES2412012	<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
		26 Oct 2024	0021_SW035_241026	ES2435541	<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
		03 Apr 2025	0021_QC107_250403	ES2510113	<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
			0021_SW035_250403	ES2510622	<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
Receptor	0021_SW032	27 Jul 2017	LM_SD01	ES1718711	0.002	0.0023	<0.0005	0.0043	0.0043	-	0.0043	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
			LM_SW01	ES1718711	0.0019	0.0026	<0.0005	0.0045	0.0045	-	0.0045	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		25 Aug 2017	LM_SW01	ES1721233	<0.01	<0.02	<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
		14 May 2018	LM_SW01_180514	ES1814324	<0.01	<0.02	<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
		12 Feb 2019	LM_SW01_190212	ES1904669	0.001	0.0017	<0.0005	0.0027	0.0027	-	0.0027	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		18 Mar 2019	LM_SW01_190318	ES1908940	0.0030	<0.0020[#4]	<0.0020[#4]	0.0030	0.0030	-	0.0030	-	<0.0020[#4]	<0.0020[#4]	-	<0.0020[#4]	-	<0.0020[#4]	<0.002	<0.0020[#4]	<0.0020[#4]	<0.0020[#4]	<0.0020[#4]
		21 Oct 2021	0021_SW032_211021	ES2138639	**0.02**	<0.01	<0.01	0.02	0.02	-	**0.02**	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02
		05 Apr 2022	0021_SW032_220405	ES2212442	<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
		10 Oct 2022	0021_SW032_221010	ES2237106	<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
		18 Apr 2023	0021_SW032_230418	ES2313364	<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
		17 Oct 2023	0021_SW032_231017	ES2336399	<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
		09 Apr 2024	0021_SW032_240409	ES2412012	<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
		25 Oct 2024	0021_QC113_241025	ES2435541	<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
			0021_QC213_241025	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	<0.05	<0.01	<0.01	<0.01	<0.01
			0021_SW032_241025	ES2435541	<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
		04 Apr 2025	0021_SW032_250404	ES2510622	<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
	0021_SW034	27 Jul 2017	LM_SW03	ES1718711	0.0018	0.0021	<0.0005	0.0039	0.0039	-	0.0039	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		25 Aug 2017	LM_SW03	ES1721233	<0.01	<0.02	<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
		14 May 2018	LM_SW03_180514	ES1814324	<0.01	<0.02	<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
		12 Feb 2019	LM_QC106_190212	ES1904669	0.0012	0.0014	<0.0005	0.0026	0.0026	-	0.0026	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
			LM_SW03_190212	ES1904669	0.0013	0.0017	<0.0005	0.003	0.003	-	0.003	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		18 Mar 2019	LM_SW03_190318	ES1908940	0.0024	0.0032	<0.0020[#4]	0.0056	0.0056	-	0.0056	-	<0.0020[#4]	<0.0020[#4]	-	<0.0020[#4]	-	<0.0020[#4]	<0.002	<0.0020[#4]	<0.0020[#4]	<0.0020[#4]	<0.0020[#4]
		21 Oct 2021	0021_SW034_211021	ES2138639	<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
		05 Apr 2022	0021_SW034_220405	ES2212442	<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
		10 Oct 2022	0021_SW034_221010	ES2237106	<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
		18 Apr 2023	0021_SW034_230418	ES2313364	<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
		17 Oct 2023	0021_SW034_231017	ES2336399	<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
		09 Apr 2024	0021_SW034_240409	ES2412012	<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
		25 Oct 2024	0021_SW034_241025	ES2435541	<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
		04 Apr 2025	0021_SW034_250404	ES2510622	<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
	0021_SW036	27 Jul 2017	LW_SW01	ES1718711	0.0008	<0.0005	<0.0005	0.0008	0.0008	-	0.0008	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		25 Aug 2017	LW_SW01	ES1721233	<0.01	<0.02	<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
		14 May 2018	LW_SW01_180514	ES1814324	<0.01	<0.02	<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
		12 Feb 2019	LW_SW01_190212	ES1904669	0.0004	<0.0005	<0.0005	0.0004	0.0004	-	0.0004	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		18 Mar 2019	LW_SW01_190318	ES1908940	0.0004	<0.0005	<0.0005	0.0004	0.0004	-	0.0004	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		22 Oct 2021	0021_SW036_211022	ES2138639	<0.0002	<0.0005	<0.0005	0.0015	0.0015	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
		05 Apr 2022	0021_SW036_220405	ES2212442	0.0005	<0.0005	<0.0005	0.0034	0.0034	-	0.0005	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	0.0029	<0.0005	<0.0005	<0.0005	<0.0005
		10 Oct 2022	0021_SW036_221010	ES2237106	0.0005	<0.0005	<0.0005	0.0053	0.0053	-	0.0005	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids						PFAS - Perfluoroalk				
					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)	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	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	0.001	0.0005	0.002	0.0005	0.0005	0.0004	0.0004
0020_0021_Human health consumption of biota					**0.01**	**0.01**					**0.01**												
PFAS NEMP 2025 Freshwater and Interim Marine 95%					0.13		220																
PFAS NEMP 2025 Drinking water quality					0.07[#1]	0.07[#1]	0.56[#1]				0.07[#1]												
PFAS NEMP 2025 Recreational water quality					2	2	10				2												
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																			
Receptor	0021_SW036	18 Apr 2023	0021_SW036_230418	ES2313364	0.0006	<0.0005	<0.0005	0.0006	0.0006	-	0.0006	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
		17 Oct 2023	0021_SW036_231017	ES2336399	0.0014	<0.0005	<0.0005	0.0014	0.0014	-	0.0014	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
		09 Apr 2024	0021_SW036_240409	ES2412012	0.0008	<0.0005	<0.0005	0.0008	0.0008	-	0.0008	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
		25 Oct 2024	0021_SW036_241025	ES2435541	0.0005	<0.0005	<0.0005	0.0005	0.0005	-	0.0005	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		04 Apr 2025	0021_SW036_250404	ES2510622	0.0009	<0.0005	<0.0005	0.0009	0.0009	-	0.0009	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
	0021_SW037	27 Jul 2017	LW_SW02	ES1718711	0.001	0.0006	<0.0005	0.0016	0.0016	-	0.0016	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		25 Aug 2017	LW_SW02	ES1721233	<0.01	<0.02	<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
		16 May 2018	LW_QC117_180516	ES1814324	<0.01	<0.02	<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
			LW_SW02_180516	ES1814324	<0.01	<0.02	<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
		12 Feb 2019	LW_QC109_190212	ES1905115	0.0006	<0.0005	<0.0005	0.0006	0.0006	-	0.0006	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
			LW_SW02_190212	ES1905115	0.0009	<0.0005	<0.0005	0.0009	0.0009	-	0.0009	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		18 Mar 2019	LW_QC109_190318	ES1908940	0.0004	<0.0005	<0.0005	0.0004	0.0004	-	0.0004	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
			LW_QC201_190319	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	<0.005	<0.001	<0.001	<0.001	<0.001
			LW_SW02_190318	ES1908940	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	-	<0.0003	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		22 Oct 2021	0021_SW037_211022	ES2138639	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
		06 Apr 2022	0021_SW037_220406	ES2212442	0.0008	<0.0005	<0.0005	0.0041	0.0041	-	0.0008	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	0.0033	<0.0005	<0.0005	<0.0005	<0.0005
		10 Oct 2022	0021_SW037_221010	ES2237106	0.0017	<0.0005	<0.0005	0.0068	0.0068	-	0.0017	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
		18 Apr 2023	0021_SW037_230418	ES2313364	0.0006	<0.0005	<0.0005	0.0006	0.0006	-	0.0006	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
		17 Oct 2023	0021_SW037_231017	ES2336399	0.0004	<0.0005	<0.0005	0.0004	0.0004	-	0.0004	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
		09 Apr 2024	0021_SW037_240409	ES2412012	0.0020	0.0044	0.0009	0.0083	0.0083	-	0.0064	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	0.0010
		25 Oct 2024	0021_SW037_241025	ES2435541	0.0007	<0.0005	<0.0005	0.0007	0.0007	-	0.0007	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		07 Apr 2025	0021_SW037_250407	ES2510622	0.0007	<0.0005	<0.0005	0.0007	0.0007	-	0.0007	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
	0021_SW038	27 Jul 2017	LW_SW03	ES1718711	0.0008	<0.0005	<0.0005	0.0008	0.0008	-	0.0008	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		25 Aug 2017	LW_SW03	ES1721233	<0.01	<0.02	<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
		14 May 2018	LW_SW03_180514	ES1814324	<0.01	<0.02	<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
		12 Feb 2019	LW_SW03_190212	ES1904669	0.0003	<0.0005	<0.0005	0.0003	0.0003	-	0.0003	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		18 Mar 2019	LW_SW03_190318	ES1908940	0.0009	0.0009	<0.0005	0.0018	0.0018	-	0.0018	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		22 Oct 2021	0021_SW038_211022	ES2138639	<0.0002	<0.0005	<0.0005	<0.0002	<0.0002	-	<0.0002	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.0020	<0.0005	<0.0005	<0.0005	<0.0005
		26 Oct 2024	0021_SW038_241026	ES2435541	0.0009	<0.0005	<0.0005	0.0009	0.0009	-	0.0009	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
	0021_SW040	06 Apr 2018	LW_SW05_180406	ES1810551	0.0007	0.0006	<0.0005	0.0013	0.0013	-	0.0013	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		11 Feb 2019	LW_QC103_190211	ES1904669	0.0009	<0.0005	<0.0005	0.0009	0.0009	-	0.0009	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		12 Feb 2019	LW_SW05_190212	ES1905115	0.0004	<0.0005	<0.0005	0.0004	0.0004	-	0.0004	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		18 Mar 2019	LW_SW05_190318	ES1908940	0.0017	0.0007	<0.0005	0.0024	0.0024	-	0.0024	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		18 Apr 2023	0021_SW040_230418	ES2313364	<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
		17 Oct 2023	0021_SW040_231017	ES2336399	<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
		09 Apr 2024	0021_SW040_240409	ES2412012	<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
		25 Oct 2024	0021_QC115_241025	ES2435541	<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
			0021_QC215_241025	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	<0.05	<0.01	<0.01	<0.01	<0.01
			0021_SW040_241025	ES2435541	0.0009	<0.0005	<0.0005	0.0009	0.0009	-	0.0009	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		04 Apr 2025	0021_SW040_250404	ES2510622	0.0007	<0.0005	<0.0005	0.0007	0.0007	-	0.0007	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids						PFAS - Perfluoroalk				
	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)	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	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	0.001	0.0005	0.002	0.0005	0.0005	0.0004	0.0004
0020_0021_Human health consumption of biota	**0.01**	**0.01**					**0.01**												
PFAS NEMP 2025 Freshwater and Interim Marine 95%	0.13		220																
PFAS NEMP 2025 Drinking water quality	0.07[#1]	0.07[#1]	0.56[#1]				0.07[#1]												
PFAS NEMP 2025 Recreational water quality	2	2	10				2												

Statistics

Number of Results	188	188	188	188	182	11	188	5	188	188	3	188	3	188	188	188	188	188	188
Number of Detects	78	24	8	93	86	4	78	0	1	0	0	0	0	1	3	0	0	4	8
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	<0.001	<0.0005	<0.002	<0.0005	<0.0005	<0.0004	<0.0004
Minimum Detect	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	ND	0.0012	ND	ND	ND	ND	0.0007	0.0029	ND	ND	0.0006	0.0006
Maximum Concentration	0.02	<0.02	<0.01	<0.1	0.07	<0.01	0.02	<0.01	<0.02	<0.02	<0.01	<0.02	<0.01	<0.02	<0.1	<0.02	<0.05	<0.02	<0.02
Maximum Detect	0.02	0.0061	0.0062	0.07	0.07	0.0007	0.02	ND	0.0012	ND	ND	ND	ND	0.0007	0.0033	ND	ND	0.0036	0.0176
Average Concentration *	0.002	0.0021	0.0016	0.0055	0.0048	0.0021	0.0023	0.0032	0.0028	0.0029	0.0035	0.0028	0.0035	0.0028	0.014	0.0029	0.003	0.0029	0.003
Geometric Average *	0.00073	0.00074	0.00061	0.0015	0.0014	0.0009	0.00082	0.002	0.0007	0.00073	0.0023	0.00071	0.0023	0.00072	0.003	0.00073	0.00075	0.00072	0.00075
Median Concentration *	0.0007	0.00025	0.00025	0.00255	0.00255	0.0005	0.0008	0.005	0.00025	0.00025	0.005	0.00025	0.005	0.00025	0.001	0.00025	0.00025	0.00025	0.00025
Standard Deviation *	0.0026	0.003	0.0021	0.011	0.0089	0.0023	0.0028	0.0025	0.0042	0.0043	0.0026	0.0042	0.0026	0.0042	0.021	0.0043	0.0045	0.0042	0.0044
Geometric Standard Deviation *	4.9	4.3	3.9	6.1	5.9	4.3	5	3.5	5.1	5	3.8	5	3.8	5	5.5	5	5.1	5	5.1
95% UCL (Student's-t) *	0.00232	0.0025	0.00187	0.00673	0.00589	0.00334	0.00262	0.00555	0.00335	0.0034	0.00788	0.00335	0.00788	0.00336	0.0165	0.0034	0.00355	0.00337	0.00348
Number of Env Standard Exceedances	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Number of Env Standard Exceedances (Detects Only)	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
% of Detects	41	13	4	49	47	36	41	0	1	0	0	0	0	1	2	0	0	2	4
% of Non-Detects	59	87	96	51	53	64	59	100	99	100	100	100	100	99	98	100	100	98	96
% of Detects at or above Env Standards	1	0	0	0	0	0	1	0	0	0	0	0	0	0	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	100	100	100	100	100	100	100

* A Non Detect Multiplier of 0.5 has been applied.

Comments

#1 Applicable to Lake Windermere surface water locations only (0021_SW036, 0021_SW037, 0021_SW038, and 0021_SW040)

Environmental Standards

HEPA, March 2025, PFAS NEMP 2025 Drinking water quality
HEPA, March 2025, PFAS NEMP 2025 Freshwater and Interim Marine 95%
HEPA, March 2025, PFAS NEMP 2025 Recreational water quality
JBRF/HMAS Creswell OMP Site Specific Criteria

					yl Carboxylic Acids					PFAS - Perfluoroalkyl Sulfonamide								PFAS - Fluorotelomer Sulfonic Acids			
					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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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	µg/L
EQL					0.0005	0.0005	0.0005	0.0005	0.0005	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.0004	0.0004
0020_0021_Human health consumption of biota																					
PFAS NEMP 2025 Freshwater and Interim Marine 95%																					
PFAS NEMP 2025 Drinking water quality																					
PFAS NEMP 2025 Recreational water quality																					
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																	
Pathway	0021_MW129	13 Apr 2018	LM_MW02_180413	ES1810721	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
			LM_MW02_PRE_180413	ES1810721	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		03 May 2018	LM_MW02_180503	ES1812871	<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
		13 Feb 2019	LM_MW02_190213	ES1905115	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	0.003	<0.001
		31 May 2019	LM_MW02_190531	ES1916831	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	0.029	<0.001
		22 Oct 2021	0021_MW129_211022	ES2138639	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	0.005	<0.001
		06 Apr 2022	0021_MW129_220406	ES2212442	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	0.002	<0.001
		10 Oct 2022	0021_MW129_221010	ES2237106	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		18 Apr 2023	0021_MW129_230418	ES2313364	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		17 Oct 2023	0021_MW129_231017	ES2336398	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		09 Apr 2024	0021_MW129_240409	ES2411994	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		26 Oct 2024	0021_MW129_241026	ES2435541	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		04 Apr 2025	0021_MW129_250404	ES2510113	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
	0021_MW130	12 Apr 2018	LW_MW01_180412	ES1810721	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		15 May 2018	LW_MW01_180515	ES1814324	<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
		13 Feb 2019	LW_MW01_190213	ES1905115	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	0.002	<0.001
		30 May 2019	LW_MW01_190530	ES1916831	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	0.004	<0.001
		21 Oct 2021	0021_MW130_211021	ES2138639	<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	0.07	<0.05
		06 Apr 2022	0021_MW130_220406	ES2212442	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	0.002	<0.001
			0021_QC105_220406	ES2212442	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	0.002	<0.001
		10 Oct 2022	0021_MW130_221010	ES2237106	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		18 Apr 2023	0021_MW130_230418	ES2313364	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		17 Oct 2023	0021_MW130_231017	ES2336398	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		09 Apr 2024	0021_MW130_240409	ES2411994	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		26 Oct 2024	0021_MW130_241026	ES2435541	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		04 Apr 2025	0021_MW130_250404	ES2510113	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
	0021_MW135	30 May 2019	LM_MW03A_190530	ES1916831	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		21 Oct 2021	0021_MW135_211021	ES2138639	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	0.014	<0.001
			0021_QC112_211021	ES2138639	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	0.014	<0.001
		06 Apr 2022	0021_MW135_220406	ES2212442	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	0.005	<0.001
		10 Oct 2022	0021_MW135_221010	ES2237106	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		18 Apr 2023	0021_MW135_230418	ES2313364	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		17 Oct 2023	0021_MW135_231017	ES2336398	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
			0021_QC103_231017	ES2336399	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
			0021_QC203_231017	335876	<0.001	<0.002	<0.05	<0.01	<0.002	<0.1	<0.002	<0.5	<0.05	<0.002	<0.05	<0.01	-	<0.002	<0.001	0.0005	<0.0004
		09 Apr 2024	0021_MW135_240409	ES2411994	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.0009	-	<0.001	<0.001	<0.001	<0.001
		26 Oct 2024	0021_MW135_241026	ES2435541	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		04 Apr 2025	0021_MW135_250404	ES2510113	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	0.016	<0.001
	0021_MW136	30 May 2019	LM_MW03B_190530	ES1916831	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		21 Oct 2021	0021_MW136_211021	ES2138639	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		06 Apr 2022	0021_MW136_220406	ES2212442	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	0.012	<0.001
		10 Oct 2022	0021_MW136_221010	ES2237106	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		18 Apr 2023	0021_MW136_230418	ES2313364	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		17 Oct 2023	0021_MW136_231017	ES2336398	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		09 Apr 2024	0021_MW136_240409	ES2411994	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		26 Oct 2024	0021_MW136_241026	ES2435541	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
			0021_QC120_241026	ES2435541	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
			0021_QC220_241026	ES2435541	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		04 Apr 2025	0021_MW136_250404	ES2510113	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001

					yl Carboxylic Acids					PFAS - Perfluoroalkyl Sulfonamide								PFAS - Fluorotelomer Sulfonic Acids			
					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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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	µg/L
EQL					0.0005	0.0005	0.0005	0.0005	0.0005	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.0004	0.0004
0020_0021_Human health consumption of biota																					
PFAS NEMP 2025 Freshwater and Interim Marine 95%																					
PFAS NEMP 2025 Drinking water quality																					
PFAS NEMP 2025 Recreational water quality																					
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																	
Pathway	0021_MW137	30 May 2019	0021_QC201_190530	660059	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.001	<0.001	<0.005	<0.001
			LM_MW03C_190530	ES1916831	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		21 Oct 2021	0021_MW137_211021	ES2138639	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
			0021_QC212_211021	281322	<0.001	<0.002	<0.05	<0.01	<0.002	<0.01	<0.002	<0.05	<0.005	<0.002	<0.005	<0.01	-	<0.002	<0.001	<0.0004	<0.0004
		06 Apr 2022	0021_MW137_220406	ES2212442	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		10 Oct 2022	0021_MW137_221010	ES2237106	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		18 Apr 2023	0021_MW137_230418	ES2313364	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	0.0012	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		17 Oct 2023	0021_MW137_231017	ES2336398	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		09 Apr 2024	0021_MW137_240409	ES2411994	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		26 Oct 2024	0021_MW137_241026	ES2435541	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		04 Apr 2025	0021_MW137_250404	ES2510113	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
	0021_MW138	30 May 2019	LW_MW02A_190530	ES1916831	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		21 Oct 2021	0021_MW138_211021	ES2138639	<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
		05 Apr 2022	0021_MW138_220405	ES2212442	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	0.021	<0.001
			0021_QC200_220405	293031	<0.001	<0.002	<0.05	<0.01	<0.002	<0.01	<0.002	<0.05	<0.005	<0.002	<0.005	<0.01	-	<0.002	<0.001	0.037	<0.0004
		10 Oct 2022	0021_MW138_221010	ES2237106	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	0.011	<0.001
			0021_QC200_221010	308187	<0.01	<0.02	<0.5	<0.1	<0.02	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	-	<0.02	<0.01	0.03	<0.02
		18 Apr 2023	0021_MW138_230418	ES2313364	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	0.014	<0.001
		17 Oct 2023	0021_MW138_231017	ES2336398	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	0.012	<0.001
		09 Apr 2024	0021_MW138_240409	ES2411994	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	0.010	<0.001
		26 Oct 2024	0021_MW138_241026	ES2435541	<0.0005	0.0070	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	0.028	<0.001
		03 Apr 2025	0021_MW138_250403	ES2510113	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	0.009	<0.001
	0021_MW139	30 May 2019	LW_MW02B_190530	ES1916831	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		21 Oct 2021	0021_MW139_211021	ES2138639	<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
		05 Apr 2022	0021_MW139_220405	ES2212442	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
			0021_QC100_220405	ES2212442	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		10 Oct 2022	0021_MW139_221010	ES2237106	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		18 Apr 2023	0021_MW139_230418	ES2313364	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
			0021_QC100_230418	ES2313364	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
			0021_QC200_230418	321517	<0.001	<0.002	<0.05	<0.01	<0.002	<0.1	<0.002	<0.5	<0.05	<0.002	<0.05	<0.01	-	<0.002	<0.001	<0.0004	<0.0004
		17 Oct 2023	0021_MW139_231017	ES2336398	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		09 Apr 2024	0021_MW139_240409	ES2411994	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
			0021_QC100_240409	ES2411994	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
			0021_QC200_240409	348825	<0.001	<0.002	<0.05	<0.01	<0.002	<0.1	<0.002	<0.5	<0.05	<0.002	<0.05	<0.01	-	<0.002	<0.001	<0.0004	<0.0004
		26 Oct 2024	0021_MW139_241026	ES2435541	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		03 Apr 2025	0021_MW139_250403	ES2510113	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
			0021_QC108_250403	ES2510113	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
			0021_QC208_250403	1210052	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.001	<0.001	<0.005	<0.001
	0021_MW140	30 May 2019	LW_MW02C_190530	ES1916831	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		21 Oct 2021	0021_MW140_211021	ES2138639	<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
		05 Apr 2022	0021_MW140_220405	ES2212442	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		10 Oct 2022	0021_MW140_221010	ES2237106	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		18 Apr 2023	0021_MW140_230418	ES2313364	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		17 Oct 2023	0021_MW140_231017	ES2336398	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		09 Apr 2024	0021_MW140_240409	ES2411994	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		26 Oct 2024	0021_MW140_241026	ES2435541	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		03 Apr 2025	0021_MW140_250403	ES2510113	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
	0021_SW035	27 Jul 2017	LM_SW04	ES1718711	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.05	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001
		25 Aug 2017	LM_SW04	ES1721233	<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
			TNQA101	ES1721233	<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

					yl Carboxylic Acids					PFAS - Perfluoroalkyl Sulfonamide								PFAS - Fluorotelomer Sulfonic Acids			
					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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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	µg/L
EQL					0.0005	0.0005	0.0005	0.0005	0.0005	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.0004	0.0004
0020_0021_Human health consumption of biota																					
PFAS NEMP 2025 Freshwater and Interim Marine 95%																					
PFAS NEMP 2025 Drinking water quality																					
PFAS NEMP 2025 Recreational water quality																					
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																	
Pathway	0021_SW035	11 Feb 2019	LM_SW04_190211	ES1904669	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		18 Mar 2019	LM_QC101_190318	ES1908940	<0.0020[#4]	0.0208	<0.0050[#4]	<0.0020[#4]	<0.0020[#4]	<0.005[#4]	<0.0020[#4]	<0.005[#4]	<0.005[#4]	<0.0020[#4]	<0.005[#4]	<0.0020[#4]	-	<0.002[#4]	<0.002[#4]	<0.002[#4]	<0.002[#4]
			LM_SW04_190318	ES1908940	<0.0020[#4]	0.0208	<0.0050[#4]	<0.0020[#4]	<0.0020[#4]	<0.005[#4]	<0.0020[#4]	<0.005[#4]	<0.005[#4]	<0.0020[#4]	<0.005[#4]	<0.0020[#4]	-	<0.002[#4]	<0.002[#4]	<0.002[#4]	<0.002[#4]
		22 Oct 2021	0021_SW035_211022	ES2138639	<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
		05 Apr 2022	0021_SW035_220405	ES2212442	<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
		10 Oct 2022	0021_SW035_221010	ES2237106	<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
		18 Apr 2023	0021_SW035_230418	ES2313364	<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
		10 Apr 2024	0021_SW035_240410	ES2412012	<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
		26 Oct 2024	0021_SW035_241026	ES2435541	<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
		03 Apr 2025	0021_QC107_250403	ES2510113	<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
			0021_SW035_250403	ES2510622	<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
Receptor	0021_SW032	27 Jul 2017	LM_SD01	ES1718711	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.05	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001
			LM_SW01	ES1718711	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.05	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001
		25 Aug 2017	LM_SW01	ES1721233	<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
		14 May 2018	LM_SW01_180514	ES1814324	<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
		12 Feb 2019	LM_SW01_190212	ES1904669	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		18 Mar 2019	LM_SW01_190318	ES1908940	<0.0020[#4]	<0.0020[#4]	<0.0050[#4]	<0.0020[#4]	<0.0020[#4]	<0.005[#4]	<0.0020[#4]	<0.005[#4]	<0.005[#4]	<0.0020[#4]	<0.005[#4]	<0.0020[#4]	-	<0.002[#4]	<0.002[#4]	<0.002[#4]	<0.002[#4]
		21 Oct 2021	0021_SW032_211021	ES2138639	<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
		05 Apr 2022	0021_SW032_220405	ES2212442	<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
		10 Oct 2022	0021_SW032_221010	ES2237106	<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
		18 Apr 2023	0021_SW032_230418	ES2313364	<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
		17 Oct 2023	0021_SW032_231017	ES2336399	<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
		09 Apr 2024	0021_SW032_240409	ES2412012	<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
		25 Oct 2024	0021_QC113_241025	ES2435541	<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
			0021_QC213_241025	1156146	<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	<0.01	<0.05	<0.01
			0021_SW032_241025	ES2435541	<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
		04 Apr 2025	0021_SW032_250404	ES2510622	<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
	0021_SW034	27 Jul 2017	LM_SW03	ES1718711	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.05	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001
		25 Aug 2017	LM_SW03	ES1721233	<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
		14 May 2018	LM_SW03_180514	ES1814324	<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
		12 Feb 2019	LM_QC106_190212	ES1904669	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
			LM_SW03_190212	ES1904669	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		18 Mar 2019	LM_SW03_190318	ES1908940	<0.0020[#4]	<0.0020[#4]	<0.0050[#4]	<0.0020[#4]	<0.0020[#4]	<0.005[#4]	<0.0020[#4]	<0.005[#4]	<0.005[#4]	<0.0020[#4]	<0.005[#4]	<0.0020[#4]	-	<0.002[#4]	<0.002[#4]	<0.002[#4]	<0.002[#4]
		21 Oct 2021	0021_SW034_211021	ES2138639	<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
		05 Apr 2022	0021_SW034_220405	ES2212442	<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
		10 Oct 2022	0021_SW034_221010	ES2237106	<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
		18 Apr 2023	0021_SW034_230418	ES2313364	<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
		17 Oct 2023	0021_SW034_231017	ES2336399	<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
		09 Apr 2024	0021_SW034_240409	ES2412012	<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
		25 Oct 2024	0021_SW034_241025	ES2435541	<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
		04 Apr 2025	0021_SW034_250404	ES2510622	<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
	0021_SW036	27 Jul 2017	LW_SW01	ES1718711	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.05	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001
		25 Aug 2017	LW_SW01	ES1721233	<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
		14 May 2018	LW_SW01_180514	ES1814324	<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
		12 Feb 2019	LW_SW01_190212	ES1904669	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		18 Mar 2019	LW_SW01_190318	ES1908940	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		22 Oct 2021	0021_SW036_211022	ES2138639	<0.0005	0.0015	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		05 Apr 2022	0021_SW036_220405	ES2212442	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		10 Oct 2022	0021_SW036_221010	ES2237106	<0.0005	0.0048	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001

					yl Carboxylic Acids					PFAS - Perfluoroalkyl Sulfonamide								PFAS - Fluorotelomer Sulfonic Acids			
					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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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	µg/L
EQL					0.0005	0.0005	0.0005	0.0005	0.0005	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.0004	0.0004
0020_0021_Human health consumption of biota																					
PFAS NEMP 2025 Freshwater and Interim Marine 95%																					
PFAS NEMP 2025 Drinking water quality																					
PFAS NEMP 2025 Recreational water quality																					
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																	
Receptor	0021_SW036	18 Apr 2023	0021_SW036_230418	ES2313364	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		17 Oct 2023	0021_SW036_231017	ES2336399	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		09 Apr 2024	0021_SW036_240409	ES2412012	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		25 Oct 2024	0021_SW036_241025	ES2435541	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		04 Apr 2025	0021_SW036_250404	ES2510622	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
	0021_SW037	27 Jul 2017	LW_SW02	ES1718711	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.05	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001
		25 Aug 2017	LW_SW02	ES1721233	<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
		16 May 2018	LW_QC117_180516	ES1814324	<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
			LW_SW02_180516	ES1814324	<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
		12 Feb 2019	LW_QC109_190212	ES1905115	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
			LW_SW02_190212	ES1905115	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		18 Mar 2019	LW_QC109_190318	ES1908940	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
			LW_QC201_190319	647214	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.001	<0.001	<0.005	<0.001
			LW_SW02_190318	ES1908940	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		22 Oct 2021	0021_SW037_211022	ES2138639	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		06 Apr 2022	0021_SW037_220406	ES2212442	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		10 Oct 2022	0021_SW037_221010	ES2237106	<0.0005	0.0051	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		18 Apr 2023	0021_SW037_230418	ES2313364	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		17 Oct 2023	0021_SW037_231017	ES2336399	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		09 Apr 2024	0021_SW037_240409	ES2412012	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		25 Oct 2024	0021_SW037_241025	ES2435541	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		07 Apr 2025	0021_SW037_250407	ES2510622	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
	0021_SW038	27 Jul 2017	LW_SW03	ES1718711	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.05	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001
		25 Aug 2017	LW_SW03	ES1721233	<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
		14 May 2018	LW_SW03_180514	ES1814324	<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
		12 Feb 2019	LW_SW03_190212	ES1904669	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		18 Mar 2019	LW_SW03_190318	ES1908940	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		22 Oct 2021	0021_SW038_211022	ES2138639	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		26 Oct 2024	0021_SW038_241026	ES2435541	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
	0021_SW040	06 Apr 2018	LW_SW05_180406	ES1810551	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		11 Feb 2019	LW_QC103_190211	ES1904669	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		12 Feb 2019	LW_SW05_190212	ES1905115	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		18 Mar 2019	LW_SW05_190318	ES1908940	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		18 Apr 2023	0021_SW040_230418	ES2313364	<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
		17 Oct 2023	0021_SW040_231017	ES2336399	<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
		09 Apr 2024	0021_SW040_240409	ES2412012	<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
		25 Oct 2024	0021_QC115_241025	ES2435541	<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
			0021_QC215_241025	1156146	<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	<0.01	<0.05	<0.01
			0021_SW040_241025	ES2435541	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001
		04 Apr 2025	0021_SW040_250404	ES2510622	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	-	<0.001	<0.001	<0.001	<0.001

	yl Carboxylic Acids					PFAS - Perfluoroalkyl Sulfonamide								PFAS - Fluorotelomer Sulfonic Acids			
	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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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	0.0005	0.0005	0.0005	0.0005	0.0005	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.0004	0.0004
0020_0021_Human health consumption of biota																	
PFAS NEMP 2025 Freshwater and Interim Marine 95%																	
PFAS NEMP 2025 Drinking water quality																	
PFAS NEMP 2025 Recreational water quality																	
Statistics																	
Number of Results	188	188	188	188	188	188	188	188	188	188	188	188	7	188	188	188	188
Number of Detects	0	6	0	0	0	0	1	0	0	0	0	1	0	0	0	24	0
Minimum Concentration	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.0004	<0.0004
Minimum Detect	ND	0.0015	ND	ND	ND	ND	0.0012	ND	ND	ND	ND	0.0009	ND	ND	ND	0.0005	ND
Maximum Concentration	<0.02	0.0208	<0.5	<0.1	<0.02	<0.1	<0.05	<0.5	<0.05	<0.05	<0.05	<0.1	<0.001	<0.05	<0.05	0.07	<0.05
Maximum Detect	ND	0.0208	ND	ND	ND	ND	0.0012	ND	ND	ND	ND	0.0009	ND	ND	ND	0.07	ND
Average Concentration *	0.0028	0.0032	0.0087	0.0032	0.0029	0.0082	0.0031	0.013	0.0076	0.0031	0.0085	0.0034	0.0005	0.0069	0.0068	0.0087	0.0069
Geometric Average *	0.00071	0.0008	0.001	0.00077	0.00073	0.0017	0.00077	0.0018	0.0017	0.00076	0.0019	0.00081	0.0005	0.0015	0.0014	0.002	0.0014
Median Concentration *	0.00025	0.00025	0.00025	0.00025	0.00025	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 *	0.0042	0.0046	0.021	0.0055	0.0043	0.012	0.0048	0.037	0.011	0.0048	0.011	0.0059	0	0.011	0.011	0.012	0.011
Geometric Standard Deviation *	5	5.3	8.2	5.3	5	6	5.2	6.6	5.8	5.2	6.1	5.4	1	5.5	5.5	6.1	5.7
95% UCL (Student's-t) *	0.00335	0.00374	0.0112	0.00386	0.0034	0.00969	0.00371	0.0171	0.00897	0.00371	0.00992	0.00416	0.0005	0.00816	0.00813	0.0102	0.00814
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	3	0	0	0	0	1	0	0	0	0	1	0	0	0	13	0
% of Non-Detects	100	97	100	100	100	100	99	100	100	100	100	99	100	100	100	87	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 Applicable to Lake Windermere surface water locations only (0021_SW036, 0021_SW037, 0021_SW038, and 0021_SW040)

Environmental Standards

HEPA, March 2025, PFAS NEMP 2025 Drinking water quality
HEPA, March 2025, PFAS NEMP 2025 Freshwater and Interim Marine 95%
HEPA, March 2025, PFAS NEMP 2025 Recreational water quality
JBRF/HMAS Creswell OMP Site Specific Criteria

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids							PFAS - Perfluoroalkyl Carbo					
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL					0.0001	0.0005	0.0005	0.0003	0.0003	0.0003	0.001	0.001	0.0005	0.0005	0.01	0.0005	0.001	0.0005	0.001	0.002	0.0005	0.0005	0.0005	0.0005	0.0005
PFAS NEMP 2025 Freshwater and Interim Marine 95%					0.13		220																		
PFAS NEMP 2025 Recreational water quality					2	2	10	2																	
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																					
Source	0021_MW024	04 May 2017	MW024	ES1711220	0.0031	0.0062	<0.0005	0.0093	0.011	0.0102	-	-	0.0009	<0.0005	-	<0.0005	-	0.0008	-	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Source	0021_MW024	20 Oct 2021	0021_MW024_211020	ES2138639	<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
Source	0021_MW024	06 Apr 2022	0021_MW024_220406	ES2212442	<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
Source	0021_MW024	12 Oct 2022	0021_MW024_221012	ES2237106	<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
Source	0021_MW024	17 Apr 2023	0021_MW024_230417	ES2313364	<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
Source	0021_MW024	16 Oct 2023	0021_MW024_231016	ES2336398	<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
Source	0021_MW024	08 Apr 2024	0021_MW024_240408	ES2411994	<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
Source	0021_MW024	24 Oct 2024	0021_MW024_241024	ES2435541	<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
Source	0021_MW024	24 Oct 2024	0021_QC257_241024	1156146	<0.01	<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	-	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01
Source	0021_MW024	01 Apr 2025	0021_MW024_250401	ES2510113	<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
Source	0021_MW061	21 Jun 2021	0021_MW061_210621	ES2123994	5.51	3.36	0.16	8.87	10.5	10.0	-	-	0.18	<0.02	-	0.16	-	0.29	-	<0.1	<0.02	<0.02	0.08	0.62	<0.02
Source	0021_MW061	23 Jun 2021	0021_QC211_210623	807414	4.7	3.6	0.19	8.3	10.03	9.59	4.89	8.49	0.18	<0.01	-	0.15	0.06	0.23	<0.01	0.06	<0.01	<0.01	0.10	0.65	<0.01
Source	0021_MW061	11 Apr 2024	0021_MW061_240411	ES2411994	5.23	1.75	0.11	6.98	7.88	7.59	-	-	0.08	<0.02	-	0.12	-	0.12	-	<0.1	<0.02	<0.02	0.05	0.32	<0.02
Source	0021_MW061	24 Oct 2024	0021_MW061_241024	ES2435541	5.25	1.34	0.09	6.59	7.37	7.17	-	-	0.10	<0.02	-	0.10	-	0.07	-	<0.1	<0.02	<0.02	0.04	0.30	<0.02
Source	0021_MW061	24 Apr 2025	0021_MW061_250424	ES2512435	0.07	0.03	<0.01	0.10	0.10	0.10	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_MW063	22 Jun 2021	0021_MW063_210622	ES2123994	0.84	0.75	0.03	1.59	1.83	1.72	-	-	0.04	<0.02	-	0.04	-	0.07	-	<0.1	<0.02	<0.02	<0.02	0.06	<0.02
Source	0021_MW063	22 Nov 2021	0021_MW063_211122	ES2142514	0.96	0.87	0.04	1.83	2.16	2.03	-	-	0.06	<0.02	-	0.05	-	0.08	-	<0.1	<0.02	<0.02	<0.02	0.10	<0.02
Source	0021_MW063	22 Nov 2021	0021_QC201_211122	845848	0.70[#1]	0.65[#1]	0.04[#1]	1.35	1.63	1.52	0.74	1.39	0.05	<0.01	-	0.05[#1]	0.01	0.05[#1]	<0.01	<0.05	<0.01	<0.01	<0.01	0.07	<0.01
Source	0021_MW063	25 Oct 2024	0021_MW063_241025	ES2435541	0.16	0.04	<0.01	0.20	0.20	0.20	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_MW063	25 Oct 2024	0021_QC159_241025	ES2435541	1.18	0.81	0.04	1.99	2.26	2.13	-	-	0.04	<0.02	-	0.05	-	0.08	-	<0.1	<0.02	<0.02	<0.02	0.06	<0.02
Source	0021_MW063	25 Oct 2024	0021_QC259_241025	1156160	1.7	0.89	0.04	2.59	2.92	2.81	1.74	2.63	0.04	<0.01	<0.01	0.05	0.01	0.05	-	<0.05	<0.01	<0.01	0.04	0.08	<0.01
Source	0021_MW063	29 Jan 2025	0021_MW063_250129	ES2503552	1.69	1.02	0.05	2.71	3.09	2.92	-	-	0.05	<0.02	<0.02	0.07	<0.02	0.10	-	<0.1	<0.02	<0.02	<0.02	0.09	<0.02
Source	0021_MW063	03 Apr 2025	0021_MW063_250403	ES2510113	1.57	1.08	0.05	2.65	3.02	2.86	-	-	0.06	<0.02	-	0.07	-	0.09	-	<0.1	<0.02	<0.02	<0.02	0.08	<0.02
Source	0021_MW064	22 Jun 2021	0021_MW064_210622	ES2123994	9.01	8.80	0.52	17.8	23.7	22.1	-	-	0.86	<0.02	-	0.46	-	1.12	-	0.2	<0.02	<0.02	0.30	2.02	<0.02
Source	0021_MW064	23 Jun 2021	0021_QC212_210623	807414	12	10	0.68	22	28.83	26.87	12.68	22.68	0.99	<0.01	-	0.48	0.61	0.86	0.01	0.23	<0.01	<0.01	0.34	2.2	<0.01
Source	0021_MW064	22 Nov 2021	0021_MW064_211122	ES2142514	0.23	0.91	0.02	1.14	2.14	1.88	-	-	0.32	<0.02	-	<0.02	-	0.26	-	<0.1	<0.02	<0.02	0.02	0.33	<0.02
Source	0021_MW064	22 Nov 2021	0021_QC101_211122	ES2142514	0.25	0.89	0.02	1.14	2.11	1.85	-	-	0.30	<0.02	-	<0.02	-	0.26	-	<0.1	<0.02	<0.02	0.02	0.32	<0.02
Source	0021_MW064	25 Oct 2024	0021_MW064_241025	ES2435541	0.29	0.42	0.01	0.71	1.26	1.10	-	-	0.14	<0.02	-	<0.02	-	0.09	-	<0.1	<0.02	<0.02	<0.02	0.19	<0.02
Source	0021_MW064	03 Apr 2025	0021_MW064_250403	ES2510113	0.18	0.47	<0.01	0.65	1.13	0.95	-	-	0.13	<0.02	-	<0.02	-	0.14	-	<0.1	<0.02	<0.02	<0.02	0.14	<0.02
Source	0021_MW065	22 Jun 2021	0021_MW065_210622	ES2123994	4.80	4.21	0.20	9.01	11.6	10.9	-	-	0.44	<0.02	-	0.21	-	0.44	-	<0.1	<0.02	<0.02	0.12	0.94	<0.02
Source	0021_MW065	22 Nov 2021	0021_MW065_211122	ES2142514	0.54	0.47	0.02	1.01	1.56	1.50	-	-	0.09	<0.02	-	<0.02	-	0.06	-	<0.1	<0.02	<0.02	0.02	0.30	<0.02
Source	0021_MW065	24 Oct 2024	0021_MW065_241024	ES2435541	0.15	0.18	<0.01	0.33	0.52	0.48	-	-	0.04	<0.02	-	<0.02	-	0.04	-	<0.1	<0.02	<0.02	<0.02	0.11	<0.02
Source	0021_MW065	29 Jan 2025	0021_MW065_250129	ES2503552	0.11	0.66	0.03	0.77	1.86	1.65	-	-	0.20	<0.02	<0.02	<0.02	0.07	0.14	-	<0.1	<0.02	<0.02	0.02	0.50	<0.02
Source	0021_MW065	03 Apr 2025	0021_MW065_250403	ES2510113	0.36	0.45	0.03	0.81	1.32	1.24	-	-	0.08	<0.02	-	<0.02	-	0.06	-	<0.1	<0.02	<0.02	<0.02	0.26	<0.02
Source	0021_MW101	28 Apr 2017	A_MW01	ES1710200	0.0440	0.277	0.0048	0.321	0.386	0.368	-	-	0.0116	<0.0005	-	0.0040	-	0.0135	-	<0.002	<0.0005	<0.0005	0.0023	0.0241	<0.0005
Source	0021_MW101	09 Sep 2020	0021_MW101_200909	ES2031960	0.208	0.156	0.0030	0.364	0.412	0.392	-	-	0.0035	<0.0005	-	0.0122	-	0.0073	-	0.003	<0.0005	<0.0005	0.0011	0.0149	<0.0005
Source	0021_MW101	19 Oct 2021	0021_MW101_211019	ES2138639	0.18	0.11	<0.01	0.29	0.29	0.29	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_MW101	05 Apr 2022	0021_MW101_220405	ES2212442	0.22	0.12	<0.01	0.34	0.34	0.34	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_MW101	13 Oct 2022	0021_MW101_221013	ES2237106	0.32	0.18	<0.01	0.50	0.50	0.50	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_MW101	20 Apr 2023	0021_MW101_230420	ES2313364	0.39	0.20	<0.01	0.59	0.59	0.59	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_MW101	19 Oct 2023	0021_MW101_231019	ES2336398	0.09	0.08	<0.01	0.17	0.17	0.17	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_MW101	10 Apr 2024	0021_MW101_240410	ES2411994	0.20	0.13	<0.01	0.33	0.33	0.33	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_MW101	24 Oct 2024	0021_MW101_241024	ES2435541	0.28	0.09	<0.01	0.37	0.37	0.37	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_MW101	04 Apr 2025	0021_MW101_250404	ES2510113	0.28	0.07	<0.01	0.35	0.35	0.35	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_MW103	28 Apr 2017	A_MW03	ES1710200	22.1	37.5	1.92	59.6	80.3	74.1	-	-	4.06	<0.0200	-	1.86	-	4.37	-	<0.020	<0.0200	<0.0200	0.836	6.71	<0.0200
Source	0021_MW103	02 May 2018	A_MW03_180502	ES1812871	139	29.6	2.07	169	188	180	-	-	2.32	<0.02	-	3.45	-	4.60	-	0.5	<0.02	<0.02	0.75	5.27	0.03
Source	0021_MW103	24 Jun 2020	JBRF-A-MW03-2-200624	727660	20[#1]	3.3[#1]	0.13[#1]	23.3	25.83	25.16	20.13	23.43	0.26	<0.01	-	0.20[#1]	0.08	0.32[#1]	0.07[#1]	0.21	<0.01	<0.01	0.08	1.0	<0.01
Source	0021_MW103	22 Jun 2021	0021_MW103_210622	ES2123994	13.9	2.55	0.10	16.4	17.7	17.3	-	-	0.15	<0.02	-	0.20	-	0.20	-	<0.1	<0.02	<0.02	0.05	0.47	<0.02
Source	0021_MW103	22 Jun 2021	0021_QC114_210622	ES2123994	16.0	3.12	0.12	19.1	20.6	20.2	-	-	0.19	<0.02	-	0.20	-	0.25	-	<0.1	<0.02	<0.02	0.06	0.57	<0.02
Source	0021_MW103	19 Oct 2021	0021_MW103_211019	ES2138639	14.7	3.42	0.14	18.1	20.0	19.6	-	-	0.19	<0.02	-	0.21	-	0.24	-	0.1	<0.02	<0.02	0.07	0.79	<0.02
Source	0021_MW103	22 Nov 2021	0021_MW103_211122	ES2142514	20.0	3.59	0.23	23.6	26.1	25.5	-	-	0.26	<0.02	-	0.28	-	0.32	-	0.1	<0.02	<0.02	0.09	1.05	<0.02
Source	0021_MW103	06 Apr 2022	0021_MW103_220406	ES2212442	20.7	3.76	0.18	24.5	26.8	26.2	-	-	0.36	<0.02	-	0.26	-	0.38	-	<0.1	<0.02	<0.02	0.07	0.96	<0.02
Source	0021_MW103	13 Oct 2022	0021_MW103_221013	ES2237106	26.9	2.55	0.14	29.4	30.8	30.4	-	-	0.15	<0.02	-	0.19	-	0.23	-	<0.1	<0.02	<0.02	0.06	0.52	<0.02
Source	0021_MW103	20 Apr 2023	0021_MW103_230420	ES2313364	48.4	4.21	0.24	52.6	55.1	54.3	-	-	0.24	0.03	-	0.42	-	0.35	-	0.1	<0.02	<0.02	0.09	0.83	<0.02
Source	0021_MW103	18 Oct 2023	0021_MW103_231018	ES2336398	41.6	2.07	0.15	43.7	45.2	44.7	-	-	0.15	<0.02	-	0.29	-	0.15	-	<0.1	<0.02	<0.02	0.05	0.60	<0.02
Source	0021_MW103	11 Apr 2024	0021_MW103_240411	ES2411994	36.8	3.39	0.18	40.2	42.7	41.6	-	-	0.23	0.04	-	0.41	-	0.29	-	0.1	<0.02	<0.02	0.09	0.74	<0.02
Source	0021_MW103	25 Oct 2024	0021_MW103_241025	ES2435541	37.3	2.06	0.14	39.4	41.1	40.4	-	-	0.17	<0.02	-	0.31	-	0.17	-	<0.1	<0.02	<0.02	0.04	0.59	<0.02
Source	0021_MW103	03 Apr 2025	0021_MW103_250403	ES2510113	16.9	3.07	0.10	20.0	21.8	21.2	-	-	0.28	<0.02	-	0.16	-	0.32	-	<0.1	<0.02	<0.02	0.07	0.66	<0.02
Source	0021_MW104	28 Apr 2017	A_MW04	ES1710200	0.509	0.463	0.0614	0.972	1.49	1.42	-	-	0.0498	<0.0005	-	0.0241	-	0.0465	-	<0.002	<0.0005	<0.0005	0.0237	0.217	<0.0005
Source	0021_MW104	22 Jun 2021	0021_MW104_210622	ES2123994	0.10	0.09	<0.01	0.19	0.19	0.19	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_MW104	19 Oct 2021	0021_MW104_211019	ES2138639	0.16	0.11	<0.01	0.27	0.27	0.27	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_MW104	22 Nov 2021	0021_MW104_211122	ES2142514	0.08	0.12	<0.01	0.20	0.22	0.22	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02
Source	0021_MW104	06 Apr 2022	0021_MW104_220406	ES2212442	0.08	0.11	<0.01	0.19	0.19	0.19	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_MW104	13 Oct 2022	0021_MW104_221013	ES2237106	0.06	0.10	<0.01	0.16	0.16	0.16	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_MW104	20 Apr 2023	0021_MW104_230420	ES2313364	0.12	0.18	<0.01	0.30	0.32	0.32	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02
Source	0021_MW104	18 Oct 2023	0021_MW104_231018	ES2336398	0.06	0.09	<0.01	0.15	0.15	0.15	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids							PFAS - Perfluoroalkyl Carbo					
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	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	0.001	0.0005	0.001	0.002	0.0005	0.0005	0.0005	0.0005	0.0005
PFAS NEMP 2025 Freshwater and Interim Marine 95%					0.13		220																		
PFAS NEMP 2025 Recreational water quality					2	2	10	2																	
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																					
Source	0021_MW104	11 Apr 2024	0021_MW104_240411	ES2411994	0.12	0.12	<0.01	0.24	0.24	0.24	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_MW104	24 Oct 2024	0021_MW104_241024	ES2435541	0.07	0.11	<0.01	0.18	0.18	0.18	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_MW104	25 Oct 2024	0021_QC156_241025	ES2435541	0.07	0.13	<0.01	0.20	0.20	0.20	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_MW104	29 Jan 2025	0021_MW104_250129	ES2503552	0.31	0.14	<0.01	0.45	0.47	0.47	-	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02
Source	0021_MW104	03 Apr 2025	0021_MW104_250403	ES2510113	0.12	0.05	<0.01	0.17	0.17	0.17	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_MW105	28 Apr 2017	A_MW05	ES1710200	26.1	3.55	0.182	29.6	30.7	30.4	-	-	0.0800	<0.0200	-	0.232	-	0.134	-	<0.020	<0.0200	<0.0200	0.0520	0.402	<0.0200
Source	0021_MW105	19 Oct 2021	0021_MW105_211019	ES2138639	12.5	9.08	0.27	21.6	24.7	23.6	-	-	0.40	<0.02	-	0.40	-	0.70	-	<0.1	<0.02	<0.02	0.12	1.02	<0.02
Source	0021_MW105	19 Oct 2021	0021_QC200_211019	281322	11	9.6	0.26	20	23	-	11	-	0.43	<0.02	-	0.46	-	0.68	-	0.1	<0.02	<0.05	0.13	0.95	<0.01
Source	0021_MW105	06 Apr 2022	0021_MW105_220406	ES2212442	13.9	9.59	0.40	23.5	27.9	26.6	-	-	0.55	<0.02	-	0.52	-	0.75	-	0.2	<0.02	<0.02	0.17	1.62	<0.02
Source	0021_MW105	13 Oct 2022	0021_MW105_221013	ES2237106	29.2	7.64	0.40	36.8	38.9	38.2	-	-	0.09	<0.02	-	0.54	-	0.18	-	<0.1	<0.02	<0.02	0.11	0.59	<0.02
Source	0021_MW105	20 Apr 2023	0021_MW105_230420	ES2313364	24.4	8.80	0.39	33.2	36.4	35.2	-	-	0.38	<0.02	-	0.59	-	0.59	-	<0.1	<0.02	<0.02	0.16	0.90	<0.02
Source	0021_MW105	19 Oct 2023	0021_MW105_231019	ES2336398	7.66	4.63	0.16	12.3	14.1	13.4	-	-	0.34	<0.02	-	0.26	-	0.37	-	<0.1	<0.02	<0.02	0.08	0.51	<0.02
Source	0021_MW105	11 Apr 2024	0021_MW105_240411	ES2411994	11.0	6.83	0.24	17.8	21.3	19.8	-	-	0.70	0.04	-	0.29	-	0.80	-	<0.1	<0.02	<0.02	0.14	0.86	<0.02
Source	0021_MW105	22 Oct 2024	0021_MW105_241022	ES2435078	22.0	3.58	0.17	25.6	27.2	26.6	-	-	0.09	<0.02	-	0.25	-	0.20	-	<0.1	<0.02	<0.02	0.06	0.65	<0.02
Source	0021_MW105	29 Jan 2025	0021_MW105_250129	ES2503552	16.5	6.25	0.14	22.8	24.1	23.5	-	-	0.07	<0.02	0.13	0.23	0.02	0.24	-	<0.1	<0.02	<0.02	0.07	0.44	<0.02
Source	0021_MW105	03 Apr 2025	0021_MW105_250403	ES2510113	16.0	3.43	0.09	19.4	20.5	19.9	-	-	0.07	<0.02	-	0.17	-	0.16	-	<0.1	<0.02	<0.02	0.04	0.27	<0.02
Source	0021_MW105	03 Apr 2025	0021_QC256_250403	1210052	21	4.2	0.09	25.2	26.33	25.67	21.09	25.29	<0.2	<0.01	0.27	0.24	0.02	0.13	-	<0.05	<0.01	<0.01	0.04	0.30	<0.01
Source	0021_MW106	27 Apr 2017	A_MW06	ES1710200	90.5	29.1	3.44	120	134	128	-	-	0.498	<0.0200	-	5.37	-	0.978	-	0.588	<0.0200	<0.0200	0.386	2.88	<0.0200
Source	0021_MW106	24 Jun 2020	JBRF-A-MW06-2-200624	727660	160[#1]	62[#1]	5.3[#1]	222	255.42	244.26	165.3	227.3	2.1	0.55[#1]	-	5.9[#1]	0.61	3.7[#1]	0.35[#1]	0.70	<0.01	<0.01	1.5	11	0.05[#1]
Source	0021_MW106	09 Sep 2020	0021_MW106_200909	ES2031960	96.3	45.9	3.58	142	169	159	-	-	1.00	0.107	-	6.01	-	3.65	-	0.341	0.0037	<0.0016[#2]	1.01	9.73	0.0365
Source	0021_MW106	09 Sep 2020	0021_QC123_200909	ES2031960	106	50.6	3.28	157	184	173	-	-	1.20	0.143	-	6.37	-	3.86	-	0.434	0.0050	<0.0016[#2]	1.06	9.30	0.0389
Source	0021_MW106	19 Oct 2021	0021_MW106_211019	ES2138639	177	31.2	1.60	208	222	217	-	-	0.70	0.09	-	2.22	-	2.23	-	0.2	<0.02	<0.02	0.48	5.15	0.04
Source	0021_MW106	05 Apr 2022	0021_MW106_220405	ES2212442	61.1	21.8	1.08	82.9	93.5	89.3	-	-	0.70	0.08	-	2.36	-	1.70	-	0.2	<0.02	<0.02	0.29	3.68	0.02
Source	0021_MW106	05 Apr 2022	0021_QC104_220405	ES2212442	105	34.8	1.62	140	157	150	-	-	0.84	0.08	-	5.15	-	1.50	-	0.3	<0.02	<0.02	0.44	6.23	0.03
Source	0021_MW106	13 Oct 2022	0021_MW106_221013	ES2237106	186	60.0	2.65	246	264	258	-	-	0.75	0.06	-	3.76	-	2.97	-	0.3	<0.02	<0.02	0.71	6.34	0.03
Source	0021_MW106	13 Oct 2022	0021_QC210_221013	308187	130	48	2.7	180	200	-	140	-	0.90	0.03	-	4.0	-	1.8	-	0.28	<0.02	<0.05	0.82	6.0	0.04
Source	0021_MW106	20 Apr 2023	0021_MW106_230420	ES2313364	322	103	5.91	425	466	452	-	-	1.76	0.18	-	9.50	-	4.64	-	0.7	<0.02	<0.02	1.49	14.7	0.10
Source	0021_MW106	19 Oct 2023	0021_MW106_231019	ES2336398	182	64.0	4.48	246	274	266	-	-	1.23	0.03	-	5.62	-	2.82	-	0.5	<0.02	<0.02	1.26	10.8	0.06
Source	0021_MW106	10 Apr 2024	0021_MW106_240410	ES2411994	78.2	19.8	0.97	98.0	109	105	-	-	0.64	0.19	-	1.34	-	1.41	-	0.2	<0.02	<0.02	0.40	4.37	0.03
Source	0021_MW106	24 Oct 2024	0021_MW106_241024	ES2435541	134	61.3	4.33	195	220	212	-	-	1.08	0.07	-	5.05	-	2.33	-	0.4	<0.02	<0.02	0.97	8.50	0.05
Source	0021_MW106	29 Jan 2025	0021_MW106_250129	ES2503552	151	33.4	2.35	184	200	194	-	-	0.72	<0.02	0.58	3.53	0.16	2.15	-	0.3	<0.02	<0.02	0.55	4.97	0.05
Source	0021_MW106	04 Apr 2025	0021_MW106_250404	ES2510113	62.8	17.6	0.83	80.4	88.9	85.4	-	-	0.45	0.08	-	1.96	-	1.02	-	0.2	<0.02	<0.02	0.28	2.76	<0.02
Source	0021_MW107	08 May 2017	A_MW07	ES1711220	0.162	2.52	0.0516	2.68	4.89	4.48	-	-	0.343	<0.0005	-	0.0316	-	0.379	-	<0.002	<0.0005	<0.0005	0.0946	1	0.0042
Source	0021_MW107	22 Jun 2021	0021_MW107_210622	ES2123994	3.58	3.76	0.11	7.34	8.59	8.21	-	-	0.19	<0.02	-	0.13	-	0.25	-	<0.1	<0.02	<0.02	0.06	0.42	<0.02
Source	0021_MW107	19 Oct 2021	0021_MW107_211019	ES2138639	3.93	4.28	0.14	8.21	9.90	9.42	-	-	0.21	<0.02	-	0.17	-	0.31	-	<0.1	<0.02	<0.02	0.07	0.67	<0.02
Source	0021_MW107	19 Oct 2021	0021_QC100_211019	ES2138639	3.63	3.95	0.12	7.58	9.17	8.71	-	-	0.20	<0.02	-	0.16	-	0.30	-	<0.1	<0.02	<0.02	0.07	0.62	<0.02
Source	0021_MW107	22 Nov 2021	0021_MW107_211122	ES2142514	2.69	2.36	0.10	5.05	6.29	6.03	-	-	0.16	<0.02	-	0.09	-	0.17	-	<0.1	<0.02	<0.02	0.05	0.56	<0.02
Source	0021_MW107	06 Apr 2022	0021_MW107_220406	ES2212442	2.86	2.62	0.11	5.48	6.63	6.31	-	-	0.18	<0.02	-	0.12	-	0.20	-	<0.1	<0.02	<0.02	0.04	0.42	<0.02
Source	0021_MW107	13 Oct 2022	0021_MW107_221013	ES2237106	2.72	3.05	0.13	5.77	6.84	6.54	-	-	0.13	<0.02	-	0.12	-	0.18	-	<0.1	<0.02	<0.02	0.05	0.38	<0.02
Source	0021_MW107	20 Apr 2023	0021_MW107_230420	ES2313364	2.95	3.83	0.13	6.78	8.14	7.71	-	-	0.18	<0.02	-	0.15	-	0.28	-	<0.1	<0.02	<0.02	0.06	0.46	<0.02
Source	0021_MW107	20 Apr 2023	0021_QC110_230420	ES2313364	2.01	2.31	0.08	4.32	5.15	4.80	-	-	0.09	<0.02	-	0.10	-	0.25	-	<0.1	<0.02	<0.02	0.06	0.17	<0.02
Source	0021_MW107	20 Apr 2023	0021_QC210_230420	321517	2.3	3.3	0.099	5.6	6.7	-	2.4	-	0.12	<0.02	-	0.13	-	0.22	-	0.04	<0.02	<0.05	0.04	0.40	<0.01
Source	0021_MW107	18 Oct 2023	0021_MW107_231018	ES2336398	3.31	3.45	0.13	6.76	8.15	7.79	-	-	0.15	<0.02	-	0.14	-	0.22	-	<0.1	<0.02	<0.02	0.07	0.57	<0.02
Source	0021_MW107	11 Apr 2024	0021_MW107_240411	ES2411994	2.42	3.18	0.10	5.60	6.87	6.44	-	-	0.17	<0.02	-	0.11	-	0.23	-	<0.1	<0.02	<0.02	0.06	0.43	<0.02
Source	0021_MW107	11 Apr 2024	0021_QC112_240411	ES2411994	2.76	3.31	0.10	6.07	7.39	6.97	-	-	0.18	<0.02	-	0.08	-	0.26	-	<0.1	<0.02	<0.02	0.05	0.47	<0.02
Source	0021_MW107	11 Apr 2024	0021_QC212_240411	348825	2.3	3.0	0.09	5.3	6.4	-	2.3	-	0.17	<0.02	-	0.09	-	0.21	-	0.04	<0.02	<0.05	0.05	0.40	<0.01
Source	0021_MW107	24 Oct 2024	0021_MW107_241024	ES2435541	2.44	4.44	0.21	6.88	8.94	8.42	-	-	0.26	<0.02	-	0.16	-	0.25	-	<0.1	<0.02	<0.02	0.09	0.82	<0.02
Source	0021_MW107	03 Apr 2025	0021_MW107_250403	ES2510113	1.53	1.59	0.09	3.12	4.07	3.84	-	-	0.10	<0.02	-	0.07	-	0.12	-	<0.1	<0.02	<0.02	0.05	0.37	<0.02
Source	0021_MW107	03 Apr 2025	0021_QC156_250403	ES2510113	1.86	1.42	0.11	3.28	4.19	3.98	-	-	0.09	<0.02	-	0.06	-	0.11	-	<0.1	<0.02	<0.02	0.04	0.34	<0.02
Source	0021_MW110	28 Apr 2017	B_MW01	ES1710200	0.0067	0.0581	0.0007	0.0648	0.0911	0.0822	-	-	0.0078	<0.0005	-	<0.0005	-	0.0089	-	<0.002	<0.0005	<0.0005	<0.0005	0.0068	<0.0005
Source	0021_MW110	22 Jun 2021	0021_MW110_210622	ES2123994	0.06	0.15	<0.01	0.21	0.21	0.21	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_MW110	20 Oct 2021	0021_MW110_211020	ES2138639	0.07	0.24	<0.01	0.31	0.34	0.34	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02
Source	0021_MW110	22 Nov 2021	0021_MW110_211122	ES2142514	0.02	0.11	<0.01	0.13	0.13	0.13	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_MW110	07 Apr 2022	0021_MW110_220407	ES2212442	0.86	0.38	0.02	1.24	1.47	1.40	-	-	0.04	<0.02	-	0.04	-	0.03	-	<0.1	<0.02	<0.02	<0.02	0.08	<0.02
Source	0021_MW110	13 Oct 2022	0021_MW110_221013	ES2237106	0.04	0.13	<0.01	0.17	0.17	0.17	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_MW110	20 Apr 2023	0021_MW110_230420	ES2313364	0.06	0.32	<0.01	0.38	0.42	0.42	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.04	<0.02
Source	0021_MW110	18 Oct 2023	0021_MW110_231018	ES2336398	0.02	0.08	<0.01	0.10	0.10	0.10	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_MW110	10 Apr 2024	0021_MW110_240410	ES2411994	0.04	0.21	<0.01	0.25	0.25	0.25	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_MW110	25 Oct 2024	0021_MW110_241025	ES2435541	0.05	0.13	<0.01	0.18	0.18	0.18	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_MW110	29 Jan 2025	0021_MW110_250130	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	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_MW110	30 Jan 2025	0021_QC103_250130	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	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_MW110	30 Jan 2025	0021_QC203_250130	1187025	0.17[#1]	<0.1	<0.1	0.17	<0.5	<0.5	0.17	0.17	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1
Source	0021_MW110	01 Apr 2025	0021_MW110_250401	ES2510113	<0.01	0.08	<0.01	0.08	0.08	0.08	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_MW111	28 Apr 2017	B_MW02	ES1710200	0.0952	0.0388	0.0029	0.134	0.149	0.145	-	-	0.0029	<0.0005	-	0.0009	-	0.0037	-	<0.002	<0.0005	<0.0005	0.0009	0.0040	<0.0005
Source	0021_MW111	22 Jun 2021	0021_MW111_210622	ES2123994	0.04	0.11	<0.01	0.15	0.15	0.15	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_MW111	20 Oct 2021	0021_MW111_211020	ES2138639	<0.01	0.08	<0.01	0.08	0.08	0.08	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids							PFAS - Perfluoroalkyl Carbo					
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	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	0.001	0.0005	0.001	0.002	0.0005	0.0005	0.0005	0.0005	0.0005
PFAS NEMP 2025 Freshwater and Interim Marine 95%					0.13		220																		
PFAS NEMP 2025 Recreational water quality					2	2	10	2																	
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																					
Source	0021_MW111	22 Nov 2021	0021_MW111_211122	ES2142514	<0.01	0.08	<0.01	0.08	0.08	0.08	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_MW111	07 Apr 2022	0021_MW111_220407	ES2212442	<0.01	0.05	<0.01	0.05	0.05	0.05	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_MW111	13 Oct 2022	0021_MW111_221013	ES2237106	<0.01	0.06	<0.01	0.06	0.06	0.06	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_MW111	20 Apr 2023	0021_MW111_230420	ES2313364	0.01	0.06	<0.01	0.07	0.07	0.07	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_MW111	18 Oct 2023	0021_MW111_231018	ES2336398	0.02	0.03	<0.01	0.05	0.05	0.05	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_MW111	10 Apr 2024	0021_MW111_240410	ES2411994	0.02	0.02	<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
Source	0021_MW111	25 Oct 2024	0021_MW111_241025	ES2435541	0.02	0.01	<0.01	0.03	0.03	0.03	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_MW111	30 Jan 2025	0021_MW111_250130	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	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_MW111	08 Apr 2025	0021_MW111_250408	ES2510113	0.02	0.02	<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
Source	0021_MW150	13 Aug 2020	0021_MW150_200813	ES2028499	14.2	4.76	0.206	19.0	20.4	19.7	-	-	0.108	<0.0016[#2]	-	0.399	-	0.307	-	0.030	<0.0016[#2]	<0.0016[#2]	0.0478	0.266	0.0034
Source	0021_MW150	25 Oct 2024	0021_MW150_241025	ES2435541	15.4	2.52	0.18	17.9	18.9	18.4	-	-	0.06	<0.02	-	0.37	-	0.11	-	<0.1	<0.02	<0.02	0.03	0.19	<0.02
Source	0021_MW150	25 Oct 2024	0021_QC158_241025	ES2435541	11.9	2.17	0.13	14.1	14.9	14.5	-	-	0.05	<0.02	-	0.29	-	0.10	-	<0.1	<0.02	<0.02	0.03	0.16	<0.02
Source	0021_MW150	25 Oct 2024	0021_QC258_241025	1156160	22	2.7	0.17	24.7	25.74	25.28	22.17	24.87	0.05	<0.01	<0.01	0.36	0.02	0.08	-	<0.05	<0.01	<0.01	0.10	0.21	<0.01
Source	0021_MW150	29 Jan 2025	0021_MW150_250129	ES2503552	19.6	3.09	0.30	22.7	24.2	23.4	-	-	0.09	<0.02	<0.02	0.54	0.03	0.17	-	<0.1	<0.02	<0.02	0.04	0.27	<0.02
Source	0021_MW150	04 Apr 2025	0021_MW150_250404	ES2510113	19.9	3.60	0.36	23.5	25.4	24.4	-	-	0.10	<0.02	-	0.70	-	0.22	-	<0.1	<0.02	<0.02	0.05	0.36	<0.02
Source	0021_MW151	13 Aug 2020	0021_MW151_200813	ES2028499	6.22	11.5	0.544	17.7	24.2	21.4	-	-	0.998	<0.0016[#2]	-	0.890	-	1.98	-	0.169	<0.0016[#2]	<0.0016[#2]	0.224	1.42	<0.0016[#2]
Source	0021_MW151	25 Oct 2024	0021_MW151_241025	ES2435541	8.94	6.26	0.34	15.2	18.2	16.9	-	-	0.41	<0.02	-	0.46	-	0.62	-	<0.1	<0.02	<0.02	0.10	0.69	<0.02
Source	0021_MW151	04 Apr 2025	0021_MW151_250404	ES2510113	9.40	8.58	0.40	18.0	21.4	19.8	-	-	0.45	<0.02	-	0.55	-	0.84	-	<0.1	<0.02	<0.02	0.12	0.70	<0.02
Source	0021_MW152	13 Aug 2020	0021_MW152_200813	ES2028499	31.5	12.6	0.734	44.1	50.3	47.1	-	-	0.562	<0.0016[#2]	-	1.84	-	1.30	-	0.125	<0.0016[#2]	<0.0016[#2]	0.198	1.19	0.0054
Source	0021_MW152	25 Oct 2024	0021_MW152_241025	ES2435541	25.9	9.32	0.68	35.2	39.5	37.4	-	-	0.36	<0.02	-	1.27	-	0.65	-	<0.1	<0.02	<0.02	0.12	0.85	<0.02
Source	0021_MW152	08 Apr 2025	0021_MW152_250408	ES2510113	27.4	10.4	0.70	37.8	42.2	40.0	-	-	0.37	<0.02	-	1.35	-	0.75	-	<0.1	<0.02	<0.02	0.13	0.79	<0.02
Source	0021_MW153	12 Aug 2020	0021_MW153_200812	ES2028499	15.8	11.8	0.826	27.6	34.2	31.2	-	-	0.717	<0.0016[#2]	-	1.47	-	1.54	-	0.140	<0.0016[#2]	<0.0016[#2]	0.244	1.45	0.0038
Source	0021_MW153	12 Aug 2020	0021_QC115_200812	ES2028499	17.3	11.7	0.828	29.0	35.2	32.4	-	-	0.677	<0.0016[#2]	-	1.36	-	1.47	-	0.133	<0.0016[#2]	<0.0016[#2]	0.226	1.30	0.0037
Source	0021_MW153	12 Aug 2020	0021_QC215_200812	737847	14	17	0.65[#1]	31	36.77	34.311	14.65	31.65	0.68	<0.001	-	1.0	0.31	1.1	0.037	0.13	0.009	<0.001	0.16	1.4	0.003
Source	0021_MW153	25 Oct 2024	0021_MW153_241025	ES2435541	11.6	7.14	0.54	18.7	22.3	20.8	-	-	0.38	<0.02	-	0.68	-	0.62	-	<0.1	<0.02	<0.02	0.13	0.85	<0.02
Source	0021_MW153	29 Jan 2025	0021_MW153_250129	ES2503552	14.4	7.21	0.55	21.6	25.3	23.7	-	-	0.40	<0.02	<0.02	0.76	0.17	0.67	-	<0.1	<0.02	<0.02	0.14	0.85	<0.02
Source	0021_MW153	04 Apr 2025	0021_MW153_250404	ES2510113	16.1	8.84	0.58	24.9	28.9	27.1	-	-	0.39	<0.02	-	0.91	-	0.70	-	<0.1	<0.02	<0.02	0.15	0.86	<0.02
Source	0021_MW153	04 Apr 2025	0021_QC140_250404	ES2510113	18.5	6.36	0.71	24.9	28.6	27.0	-	-	0.37	<0.02	-	0.81	-	0.60	-	<0.1	<0.02	<0.02	0.12	0.78	<0.02
Source	0021_MW153	04 Apr 2025	0021_QC240_250404	1210052	18	7.6	0.57	25.6	29.59	27.88	18.57	26.17	0.42	<0.01	0.02	0.92	0.16	0.61	-	0.10	<0.01	<0.01	0.15	0.87	<0.01
Source	0021_MW154	13 Aug 2020	0021_MW154_200813	ES2028499	9.94	46.9	1.79	56.8	91.4	80.2	-	-	8.74	<0.0016[#2]	-	1.79	-	9.44	-	1.10	0.0058	<0.0016[#2]	1.13	8.71	0.0051
Source	0021_MW154	25 Oct 2024	0021_MW154_241025	ES2435541	15.7	33.6	2.14	49.3	80.4	67.4	-	-	6.13	<0.02	-	2.30	-	6.82	-	0.9	<0.02	<0.02	1.10	6.35	<0.02
Source	0021_MW154	04 Apr 2025	0021_MW154_250404	ES2510113	20.2	35.9	2.04	56.1	85.0	73.8	-	-	6.14	<0.02	-	2.07	-	5.88	-	0.8	<0.02	<0.02	0.98	6.40	<0.02
Source	0021_MW155	13 Aug 2020	0021_MW155_200813	ES2028499	8.88	70.1	1.73	79.0	146	124	-	-	13.9	0.0360	-	2.24	-	19.5	-	1.61	0.0373	<0.0016[#2]	2.94	21.6	0.0506
Source	0021_MW155	25 Oct 2024	0021_MW155_241025	ES2435541	43.0	81.6	7.24	125	164	150	-	-	3.05	0.41	-	3.10	-	6.90	-	1.0	0.81	<0.02	2.57	9.61	0.73
Source	0021_MW155	04 Apr 2025	0021_MW155_250404	ES2510113	31.5	29.4	2.64	60.9	87.5	79.2	-	-	3.45	0.32	-	0.90	-	3.78	-	0.7	0.60	<0.02	1.05	8.63	0.50
Source	0021_SW002	20 Apr 2017	AB_SW02	ES1709644	5.61	6.40	0.120	12.0	14.0	13.6	-	-	0.514	0.0025	-	0.328	-	0.109	-	<0.002	<0.0005	<0.0005	0.0264	0.832	<0.0005
Source	0021_SW002	19 Oct 2021	0021_SW002_211019	ES2138639	5.90	4.66	0.16	10.6	12.4	11.8	-	-	0.23	<0.02	-	0.25	-	0.43	-	<0.1	<0.02	<0.02	0.07	0.60	<0.02
Source	0021_SW002	05 Apr 2022	0021_SW002_220405	ES2212442	2.00	1.04	0.06	3.04	3.59	3.44	-	-	0.12	<0.02	-	0.06	-	0.09	-	<0.1	<0.02	<0.02	0.02	0.18	<0.02
Source	0021_SW002	13 Oct 2022	0021_SW002_221013	ES2237106	3.64	2.59	0.14	6.23	7.38	7.01	-	-	0.16	<0.02	-	0.14	-	0.23	-	<0.1	<0.02	<0.02	0.05	0.36	<0.02
Source	0021_SW002	20 Apr 2023	0021_SW002_230420	ES2313364	1.17	0.70	0.05	1.87	2.32	2.22	-	-	0.05	<0.02	-	0.04	-	0.06	-	<0.1	<0.02	<0.02	<0.02	0.18	<0.02
Source	0021_SW002	18 Oct 2023	0021_SW002_231018	ES2336399	2.67	2.01	0.06	4.68	5.52	5.32	-	-	0.11	<0.02	-	0.06	-	0.14	-	<0.1	<0.02	<0.02	0.03	0.38	<0.02
Source	0021_SW002	11 Apr 2024	0021_SW002_240411	ES2412012	1.58	1.04	0.03	2.62	2.97	2.84	-	-	0.06	<0.02	-	0.04	-	0.09	-	<0.1	<0.02	<0.02	<0.02	0.13	<0.02
Source	0021_SW003	20 Apr 2017	AB_SW03	ES1709644	0.0443	0.0416	0.0011	0.0859	0.0996	0.0957	-	-	0.0020	<0.0005	-	0.0013	-	0.0026	-	<0.002	<0.0005	<0.0005	<0.0005	0.0054	<0.0005
Source	0021_SW003	19 Oct 2021	0021_SW003_211019	ES2138639	0.08	0.08	<0.01	0.16	0.16	0.16	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_SW003	05 Apr 2022	0021_SW003_220405	ES2212442	0.04	0.03	<0.01	0.07	0.07	0.07	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_SW003	13 Oct 2022	0021_QC205_221013	308187	0.04	0.03	<0.01	0.07	0.07	-	0.04	-	<0.01	<0.02	-	<0.01	-	<0.01	-	<0.02	<0.02	<0.05	<0.01	<0.01	<0.01
Source	0021_SW003	13 Oct 2022	0021_SW003_221013	ES2237106	0.04	0.04	<0.01	0.08	0.08	0.08	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_SW003	20 Apr 2023	0021_SW003_230420	ES2313364	0.06	0.05	<0.01	0.11	0.11	0.11	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_SW003	11 Apr 2024	0021_SW003_240411	ES2412012	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	<0.02	<0.02
Source	0021_SW003	03 Apr 2025	0021_SW003_250403	ES2510622	0.08	0.04	<0.01	0.12	0.12	0.12	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_SW004	13 Apr 2017	AB_SW04	ES1709064	0.0168	0.0231	0.0006	0.0399	0.0464	0.0434	-	-	0.0015	<0.0005	-	0.0010	-	0.0020	-	<0.002	<0.0005	<0.0005	<0.0005	0.0014	<0.0005
Source	0021_SW004	13 Apr 2017	TNQA08	ES1709064	0.0173	0.0249	0.0006	0.0422	0.0488	0.0459	-	-	0.0017	<0.0005	-	0.0010	-	0.0019	-	<0.002	<0.0005	<0.0005	<0.0005	0.0014	<0.0005
Source	0021_SW004	26 Oct 2021	0021_SW004_211026	ES2138639	<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
Source	0021_SW004	06 Apr 2022	0021_SW004_220406	ES2212442	<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
Source	0021_SW004	14 Oct 2022	0021_SW004_221014	ES2237106	<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
Source	0021_SW004	21 Apr 2023	0021_SW004_230421	ES2313364	<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
Source	0021_SW004	12 Apr 2024	0021_SW004_240412	ES2412012	<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
Source	0021_SW004	02 Apr 2025	0021_SW004_250402	ES2510622	<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
Source	0021_SW005	13 Apr 2017	AB_SW05	ES1709064	0.0236	0.0448	0.0010	0.0684	0.0794	0.0741	-	-	0.0025	<0.0005	-	0.0017	-	0.0036	-	<0.002	<0.0005	<0.0005	<0.0005	0.0022	<0.0005
Source	0021_SW005	20 Oct 2021	0021_SW005_211020	ES2138639	0.05	0.07	<0.01	0.12	0.12	0.12	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_SW005	06 Apr 2022	0021_SW005_220406	ES2212442	0.05	0.04	<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
Source	0021_SW005	14 Oct 2022	0021_SW005_221014	ES2237106	0.05	0.05	<0.01	0.10	0.10	0.10	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_SW005	21 Apr 2023	0021_SW005_230421	ES2313364	0.05	0.07	<0.01	0.12	0.12	0.12	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_SW005	12 Apr 2024	0021_SW005_240412	ES2412012	0.03	0.04	<0.01	0.07	0.07	0.07	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_SW005	02 Apr 2025	0021_SW005_250402	ES2510622	0.03	0.03	<0.01	0.06	0.06	0.06	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_SW006	13 Apr 2017	AB_SW06	ES1709064	0.0243	0.0135	<0.0005	0.0378	0.0414	0.0397	-	-	0.0010	<0.0005	-	0.0007	-	0.0010	-	<0.002	<0.0005	<0.0005	<0.0005	0.0009	<0.0005

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids							PFAS - Perfluoroalkyl Carbo					
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	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	0.001	0.0005	0.001	0.002	0.0005	0.0005	0.0005	0.0005	0.0005
PFAS NEMP 2025 Freshwater and Interim Marine 95%					0.13		220																		
PFAS NEMP 2025 Recreational water quality					2	2	10	2																	
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																					
Source	0021_SW006	20 Oct 2021	0021_SW006_211020	ES2138639	<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
Source	0021_SW006	06 Apr 2022	0021_SW006_220406	ES2212442	<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
Source	0021_SW006	14 Oct 2022	0021_SW006_221014	ES2237106	0.02	0.03	<0.01	0.05	0.05	0.05	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_SW006	21 Apr 2023	0021_SW006_230421	ES2313364	0.02	0.04	<0.01	0.06	0.06	0.06	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_SW006	12 Apr 2024	0021_SW006_240412	ES2412012	<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
Source	0021_SW006	02 Apr 2025	0021_SW006_250402	ES2510622	<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
Source	0021_SW011	11 Apr 2017	B_SW02	ES1708884	0.0846	0.151	0.0028	0.236	0.279	0.265	-	-	0.0101	<0.0005	-	0.0038	-	0.0098	-	<0.002	<0.0005	<0.0005	0.0017	0.0122	<0.0005
Source	0021_SW011	20 Oct 2021	0021_SW011_211020	ES2138639	0.01	0.01	<0.01	0.02	0.02	0.02	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_SW011	07 Apr 2022	0021_SW011_220407	ES2212442	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
Source	0021_SW011	12 Oct 2022	0021_SW011_221012	ES2237106	0.21	0.07	<0.01	0.28	0.30	0.30	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02
Source	0021_SW011	20 Apr 2023	0021_SW011_230420	ES2313364	0.09	0.13	<0.01	0.22	0.22	0.22	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_SW011	10 Apr 2024	0021_SW011_240410	ES2412012	<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
Source	0021_SW012	22 Nov 2021	0021_SW012_211122	ES2142514	5.15	2.91	0.12	8.06	9.54	9.15	-	-	0.24	<0.02	-	0.13	-	0.26	-	<0.1	<0.02	<0.02	0.06	0.54	<0.02
Source	0021_SW012	02 Feb 2023	0021_QC161_230202	ES2303445	6.83	5.03	0.17	11.9	13.7	13.2	-	-	0.23	<0.02	-	0.24	-	0.33	-	<0.1	<0.02	<0.02	0.09	0.70	<0.02
Source	0021_SW012	02 Feb 2023	0021_SW012_230202	ES2303445	6.28	4.97	0.18	11.2	13.1	12.6	-	-	0.24	<0.02	-	0.22	-	0.32	-	<0.1	<0.02	<0.02	0.09	0.70	<0.02
Source	0021_SW012	09 Mar 2023	0021_SW012_230309	ES2308203	7.01	3.69	0.18	10.7	12.6	12.0	-	-	0.25	<0.02	-	0.25	-	0.37	-	<0.1	<0.02	<0.02	0.09	0.68	<0.02
Source	0021_SW012	01 May 2023	0021_SW012_230501	ES2314437	1.77	0.90	0.04	2.67	3.03	2.91	-	-	0.04	<0.02	-	0.05	-	0.07	-	<0.1	<0.02	<0.02	<0.02	0.13	<0.02
Source	0021_SW012	06 Jun 2023	0021_SW012_230606	ES2319084	6.57	2.69	0.14	9.26	10.4	9.99	-	-	0.14	<0.02	-	0.18	-	0.23	-	<0.1	<0.02	<0.02	0.06	0.34	<0.02
Source	0021_SW012	08 Aug 2023	0021_QC100_230808	ES2326813	3.89	2.41	0.12	6.30	7.36	7.00	-	-	0.14	<0.02	-	0.13	-	0.23	-	<0.1	<0.02	<0.02	0.05	0.34	<0.02
Source	0021_SW012	08 Aug 2023	0021_SW012_230808	ES2326813	3.79	2.15	0.10	5.94	6.88	6.55	-	-	0.13	<0.02	-	0.13	-	0.20	-	<0.1	<0.02	<0.02	0.04	0.30	<0.02
Source	0021_SW012	12 Dec 2023	0021_QC200_231212	1054721	6.7[#1]	4.7[#1]	0.18[#1]	11.4	13.29	12.64	6.88	11.58	0.24	<0.01	0.02	0.25[#1]	0.09	0.29[#1]	-	0.06	<0.01	<0.01	0.08[#1]	0.57	<0.01
Source	0021_SW012	12 Dec 2023	0021_SW012_231212	ES2343587	6.06	4.04	0.17	10.1	11.7	11.2	-	-	0.19	<0.02	-	0.19	-	0.34	-	<0.1	<0.02	<0.02	0.09	0.52	<0.02
Source	0021_SW012	31 Mar 2025	0021_SW012_250331	ES2510622	1.29	0.67	0.02	1.96	2.15	2.08	-	-	0.02	<0.02	-	0.03	-	0.04	-	<0.1	<0.02	<0.02	<0.02	0.08	<0.02
Source	0021_SW016	13 Apr 2017	DC_SW01	ES1709064	0.0670	0.225	0.0056	0.292	0.371	0.339	-	-	0.0149	<0.0005	-	0.0053	-	0.0267	-	<0.002	<0.0005	<0.0005	0.0031	0.0192	<0.0005
Source	0021_SW016	20 Oct 2021	0021_SW016_211020	ES2138639	0.06	0.11	<0.01	0.17	0.17	0.17	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_SW016	06 Apr 2022	0021_SW016_220406	ES2212442	0.04	0.04	<0.01	0.08	0.08	0.08	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_SW016	14 Oct 2022	0021_SW016_221014	ES2237106	0.08	0.09	<0.01	0.17	0.20	0.20	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02
Source	0021_SW017	13 Apr 2017	DC_SW02	ES1709064	0.662	0.934	0.0213	1.60	1.82	1.72	-	-	0.0459	0.0018	-	0.0325	-	0.0663	-	<0.002	0.0006	<0.0005	0.0060	0.0483	<0.0005
Source	0021_SW017	06 Apr 2022	0021_QC206_220406	293031	0.77	0.47	0.03	1.2	1.4	-	0.80	-	0.02	<0.02	-	0.02	-	0.03	-	<0.02	<0.02	<0.05	<0.01	0.1	<0.01
Source	0021_SW017	06 Apr 2022	0021_SW017_220406	ES2212442	0.65	0.42	0.02	1.07	1.23	1.21	-	-	0.02	<0.02	-	<0.02	-	0.02	-	<0.1	<0.02	<0.02	<0.02	0.10	<0.02
Source	0021_SW017	14 Oct 2022	0021_SW017_221014	ES2237106	5.18	1.31	0.08	6.49	7.03	6.91	-	-	0.04	<0.02	-	0.07	-	0.05	-	<0.1	<0.02	<0.02	0.02	0.22	<0.02
Source	0021_SW110	04 Aug 2020	0021_QC101_200804	ES2027217	0.148	0.117	0.0040	0.265	0.311	0.299	-	-	0.0041	<0.0005	-	0.0049	-	0.0072	-	0.002	<0.0005	<0.0005	0.0020	0.0178	<0.0005
Source	0021_SW110	04 Aug 2020	0021_QC201_200804	736971	0.12	0.004	0.003	0.124	0.165	0.149	0.123	0.127	0.005	<0.001	-	0.006	0.002	0.008	<0.001	<0.005	<0.001	<0.001	0.001	0.013	<0.001
Source	0021_SW110	04 Aug 2020	0021_SW110_200804	ES2027217	0.147	0.108	0.0037	0.255	0.302	0.289	-	-	0.0053	<0.0016[#2]	-	0.0046	-	0.0091	-	<0.002	<0.0016[#2]	<0.0016[#2]	0.0016	0.0176	<0.0016[#2]
Source	0021_SW110	10 Aug 2020	0021_QC109_200810	ES2028286	1.37	0.546	0.0437	1.92	2.21	2.13	-	-	0.0272	0.0015	-	0.0366	-	0.0397	-	<0.002	0.0005	<0.0005	0.0118	0.108	0.0015
Source	0021_SW110	10 Aug 2020	0021_QC209_200810	737847	1.0	0.66	0.026[#1]	1.66	1.915	1.823	1.026	1.686	0.019	<0.001	-	0.053	0.008	0.030	<0.001	0.007	<0.001	<0.001	0.014	0.076	0.001
Source	0021_SW110	10 Aug 2020	0021_SW110_200810	ES2028286	1.25	0.530	0.0368	1.78	2.06	1.99	-	-	0.0275	<0.0005	-	0.0339	-	0.0381	-	<0.002	0.0005	<0.0005	0.0122	0.105	0.0013
Source	0021_SW110	19 Oct 2021	0021_SW110_211019	ES2138639	0.16	0.05	<0.01	0.21	0.21	0.21	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_SW110	22 Nov 2021	0021_QC100_211122	ES2142514	0.77	0.31	0.02	1.08	1.21	1.19	-	-	0.02	<0.02	-	<0.02	-	0.02	-	<0.1	<0.02	<0.02	<0.02	0.07	<0.02
Source	0021_SW110	22 Nov 2021	0021_SW110_211122	ES2142514	0.55	0.29	0.01	0.84	0.97	0.95	-	-	0.03	<0.02	-	<0.02	-	0.02	-	<0.1	<0.02	<0.02	<0.02	0.07	<0.02
Source	0021_SW110	05 Apr 2022	0021_SW110_220405	ES2212442	0.32	0.15	<0.01	0.47	0.50	0.50	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02
Source	0021_SW110	13 Oct 2022	0021_SW110_221013	ES2237106	0.96	0.20	0.01	1.16	1.20	1.20	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02
Source	0021_SW110	20 Apr 2023	0021_QC111_230420	ES2313364	0.48	0.16	<0.01	0.64	0.67	0.67	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02
Source	0021_SW110	20 Apr 2023	0021_QC211_230420	321517	0.39	0.18	0.01	0.57	0.64	-	0.40	-	<0.01	<0.02	-	0.02	-	0.01	-	<0.02	<0.02	<0.05	<0.01	0.03	<0.01
Source	0021_SW110	20 Apr 2023	0021_SW110_230420	ES2313364	0.32	0.12	<0.01	0.44	0.46	0.46	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02
Source	0021_SW110	19 Oct 2023	0021_SW110_231019	ES2336399	3.00	1.07	0.08	4.07	4.78	4.60	-	-	0.06	<0.02	-	0.10	-	0.08	-	<0.1	<0.02	<0.02	0.04	0.29	<0.02
Source	0021_SW110	10 Apr 2024	0021_QC110_240410	ES2412012	0.72	0.46	0.02	1.18	1.37	1.33	-	-	0.03	<0.02	-	<0.02	-	0.04	-	<0.1	<0.02	<0.02	<0.02	0.10	<0.02
Source	0021_SW110	10 Apr 2024	0021_QC210_240410	348825	0.61	0.41	0.02	1.0	1.2	-	0.63	-	0.02	<0.02	-	<0.01	-	0.04	-	<0.02	<0.02	<0.05	<0.01	0.10	<0.01
Source	0021_SW110	10 Apr 2024	0021_SW110_240410	ES2412012	0.70	0.46	0.02	1.16	1.33	1.29	-	-	0.03	<0.02	-	<0.02	-	0.04	-	<0.1	<0.02	<0.02	<0.02	0.08	<0.02
Source	0021_SW110	24 Oct 2024	0021_QC108_241024	ES2435541	2.39	0.96	<0.01	3.35	3.80	3.65	-	-	0.05	<0.02	-	0.07	-	0.08	-	<0.1	<0.02	<0.02	0.03	0.18	<0.02
Source	0021_SW110	24 Oct 2024	0021_QC208_241024	1156146	3.8	1.3	0.08	5.1	5.81	5.57	3.88	5.18	0.09	<0.01	<0.01	0.11	0.03	0.10	-	<0.05	<0.01	<0.01	0.03	0.22	<0.01
Source	0021_SW110	24 Oct 2024	0021_SW110_241024	ES2435541	2.67	1.05	0.06	3.72	4.34	4.15	-	-	0.06	<0.02	-	0.07	-	0.10	-	<0.1	<0.02	<0.02	0.03	0.22	<0.02
Source	0021_SW110	03 Apr 2025	0021_SW110_250403	ES2510623	0.31	0.29	0.01	0.60	0.70	0.68	-	-	<0.02	<0.02	-	<0.02	-	0.02	-	<0.1	<0.02	<0.02	<0.02	0.07	<0.02
Source	0021_SW112	04 Aug 2020	0021_SW112_200804	ES2027217	0.0926	0.0936	0.0037	0.186	0.226	0.216	-	-	0.0061	<0.0016[#2]	-	0.0035	-	0.0074	-	<0.002	<0.0016[#2]	<0.0016[#2]	<0.0016[#2]	0.0160	<0.0016[#2]
Source	0021_SW112	19 Oct 2021	0021_SW112_211019	ES2138639	0.11	0.05	<0.01	0.16	0.16	0.16	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_SW112	05 Apr 2022	0021_SW112_220405	ES2212442	0.16	0.10	<0.01	0.26	0.28	0.28	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02
Source	0021_SW112	13 Oct 2022	0021_SW112_221013	ES2237106	0.19	0.15	<0.01	0.34	0.36	0.36	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02
Source	0021_SW112	20 Apr 2023	0021_SW112_230420	ES2313364	0.31	0.09	<0.01	0.40	0.40	0.40	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_SW112	18 Oct 2023	0021_SW112_231018	ES2336399	0.04	0.09	<0.01	0.13	0.13	0.13	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_SW112	10 Apr 2024	0021_SW112_240410	ES2412012	0.36	0.12	<0.01	0.48	0.48	0.48	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_SW112	24 Oct 2024	0021_SW112_241024	ES2435541	4.27	1.09	0.06	5.36	5.97	5.77	-	-	0.07	<0.02	-	0.07	-	0.11	-	<0.1	<0.02	<0.02	0.03	0.20	<0.02
Source	0021_SW112	03 Apr 2025	0021_SW112_250403	ES2510623	0.07	0.08	<0.01	0.15	0.15	0.15	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_SW127	20 Aug 2020	0021_QC122_200820	EW2003840	10.7	4.96	0.208	15.7	18.4	17.3	-	-	0.252	0.0603	-	0.417	-	0.617	-	0.056	0.0019	<0.0005	0.112	0.820	0.0040
Source	0021_SW127	20 Aug 2020	0021_SW127_200820	EW2003840	7.08	4.74	0.173	11.8	13.9	13.1	-	-	0.207	0.0128	-	0.309	-	0.478	-	0.049	0.0010	<0.0005	0.0955	0.656	0.0038
Source	0021_SW127	20 Oct 2021	0021_QC105_211020	ES2138639	0.99	0.54	0.02	1.53	1.71	1.65	-	-	0.02	<0.02	-	0.02	-	0.04	-	<0.1	<0.02	<0.02	<0.02	0.08	<0.02
Source	0021_SW127	20 Oct 2021	0021_SW127_211020	ES2138639	0.81	0.46	0.02	1.27	1.39	1.36	-	-	<0.02	<0.02	-	<0.02	-	0.03	-	<0.1	<0.02	<0.02	<0.02	0.07	<0.02

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids							PFAS - Perfluoroalkyl Carbo					
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL					0.0001	0.0005	0.0005	0.0003	0.0003	0.0003	0.001	0.001	0.0005	0.0005	0.01	0.0005	0.001	0.0005	0.001	0.002	0.0005	0.0005	0.0005	0.0005	0.0005
PFAS NEMP 2025 Freshwater and Interim Marine 95%					0.13		220																		
PFAS NEMP 2025 Recreational water quality					2	2	10	2																	
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																					
Source	0021_SW127	22 Nov 2021	0021_SW127_211122	ES2142514	8.34	3.47	0.16	11.8	13.4	13.0	-	-	0.21	0.02	-	0.19	-	0.27	-	<0.1	<0.02	<0.02	0.06	0.64	<0.02
Source	0021_SW127	07 Apr 2022	0021_SW127_220407	ES2212442	0.04	0.02	<0.01	0.06	0.06	0.06	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_SW127	12 Oct 2022	0021_SW127_221012	ES2237106	4.32	1.93	0.09	6.25	7.05	6.78	-	-	0.08	<0.02	-	0.11	-	0.16	-	<0.1	<0.02	<0.02	0.04	0.27	<0.02
Source	0021_SW127	02 Feb 2023	0021_QC261_230202	961609	5.7[#1]	4.3[#1]	0.17[#1]	10	11.95	11.35	5.87	10.17	0.26	0.01	0.02	0.16[#1]	0.09	0.32[#1]	-	0.05	<0.01	<0.01	0.08[#1]	0.68[#1]	<0.01
Source	0021_SW127	02 Feb 2023	0021_SW127_230202	ES2303445	4.49	4.80	0.16	9.29	11.1	10.6	-	-	0.23	<0.02	-	0.21	-	0.33	-	<0.1	<0.02	<0.02	0.10	0.69	<0.02
Source	0021_SW127	09 Mar 2023	0021_SW127_230309	ES2308203	6.01	2.45	0.14	8.46	9.80	9.34	-	-	0.16	0.02	-	0.20	-	0.24	-	<0.1	<0.02	<0.02	0.06	0.44	<0.02
Source	0021_SW127	20 Apr 2023	0021_SW127_230420	ES2313364	3.93	3.57	0.12	7.50	8.65	8.20	-	-	0.12	<0.02	-	0.13	-	0.32	-	<0.1	<0.02	<0.02	0.07	0.30	<0.02
Source	0021_SW127	01 May 2023	0021_QC100_230501	ES2314437	0.12	0.06	<0.01	0.18	0.18	0.18	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_SW127	01 May 2023	0021_QC200_230501	987074	0.14[#1]	0.07[#1]	<0.01	0.21	0.21	0.21	0.14	0.21	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01
Source	0021_SW127	01 May 2023	0021_SW127_230501	ES2314437	0.11	0.06	<0.01	0.17	0.17	0.17	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Source	0021_SW127	06 Jun 2023	0021_SW127_230606	ES2319084	2.26	1.53	0.08	3.79	4.50	4.27	-	-	0.09	<0.02	-	0.09	-	0.14	-	<0.1	<0.02	<0.02	0.03	0.24	<0.02
Source	0021_SW127	18 Oct 2023	0021_SW127_231018	ES2336399	7.25	2.24	0.12	9.49	10.6	10.2	-	-	0.13	<0.02	-	0.18	-	0.21	-	<0.1	<0.02	<0.02	0.05	0.37	<0.02
Source	0021_SW127	10 Apr 2024	0021_SW127_240410	ES2412012	3.26	2.64	0.09	5.90	6.85	6.52	-	-	0.13	<0.02	-	0.10	-	0.19	-	<0.1	<0.02	<0.02	0.04	0.32	<0.02
Source	0021_SW127	01 Apr 2025	0021_SW127_250401	ES2510623	2.06	1.33	0.04	3.39	3.78	3.63	-	-	0.05	<0.02	-	0.06	-	0.09	-	<0.1	<0.02	<0.02	<0.02	0.15	<0.02
Source	0021_SW130	24 Jun 2020	JBRF-A-SW03-200624	727660	3.3[#1]	2.7[#1]	0.09[#1]	6	7.09	6.66	3.39	6.09	0.12	<0.01	-	0.15[#1]	0.04	0.24[#1]	<0.01[#1]	<0.05	<0.01	<0.01	0.05	0.36	<0.01
Source	0021_SW130	09 Sep 2020	0021_QC222_200909	743330	1.9	0.98	0.028[#1]	2.88	3.237	3.061	1.928	2.908	0.045	0.002	-	0.057	0.020	0.093	0.004	0.006	<0.001	<0.001	0.010[#1]	0.082[#1]	<0.001[#1]
Source	0021_SW130	09 Sep 2020	0021_SW130_200909	ES2031960	1.87	1.30	0.0410	3.17	3.60	3.42	-	-	0.0477	0.0040	-	0.0698	-	0.112	-	0.006	0.0006	<0.0005	0.0157	0.124	0.0012
Source	0021_SW130	19 Oct 2021	0021_SW130_211019	ES2138639	4.82	3.36	0.12	8.18	9.76	9.26	-	-	0.15	<0.02	-	0.22	-	0.28	-	<0.1	<0.02	<0.02	0.07	0.64	<0.02
Source	0021_SW130	22 Nov 2021	0021_QC200_211122	845848	2.6[#1]	1.2[#1]	0.08[#1]	3.8	4.54	4.35	2.68	3.88	0.06	<0.01	-	0.10[#1]	0.02	0.07[#1]	<0.01	0.06	<0.01	<0.01	0.03[#1]	0.28	<0.01
Source	0021_SW130	22 Nov 2021	0021_SW130_211122	ES2142514	2.74	1.55	0.10	4.29	5.14	4.92	-	-	0.10	<0.02	-	0.10	-	0.12	-	<0.1	<0.02	<0.02	0.04	0.35	<0.02
Source	0021_SW130	05 Apr 2022	0021_SW130_220405	ES2212442	2.49	1.07	0.07	3.56	4.17	4.00	-	-	0.07	<0.02	-	0.09	-	0.08	-	<0.1	<0.02	<0.02	0.02	0.24	<0.02
Source	0021_SW130	13 Oct 2022	0021_QC206_221013	308187	2.2	0.96	0.07	3.2	3.7	-	2.3	-	0.04	<0.02	-	0.08	-	0.07	-	0.02	<0.02	<0.05	0.02	0.16	<0.01
Source	0021_SW130	13 Oct 2022	0021_SW130_221013	ES2237106	2.13	1.08	0.07	3.21	3.68	3.53	-	-	0.04	<0.02	-	0.08	-	0.07	-	<0.1	<0.02	<0.02	0.02	0.16	<0.02
Source	0021_SW130	20 Apr 2023	0021_QC106_230420	ES2313364	0.46	0.38	0.02	0.84	1.03	0.99	-	-	0.02	<0.02	-	<0.02	-	0.04	-	<0.1	<0.02	<0.02	<0.02	0.06	<0.02
Source	0021_SW130	20 Apr 2023	0021_QC206_230420	321517	0.57	0.40	0.03	0.97	1.4	-	0.60	-	0.04	<0.02	-	0.03	-	0.04	-	0.05	<0.02	<0.05	<0.01	0.14	<0.01
Source	0021_SW130	20 Apr 2023	0021_SW130_230420	ES2313364	0.50	0.39	0.02	0.89	1.09	1.05	-	-	0.02	<0.02	-	<0.02	-	0.04	-	<0.1	<0.02	<0.02	<0.02	0.07	<0.02
Source	0021_SW130	18 Oct 2023	0021_QC109_231018	ES2336399	0.65	0.52	0.02	1.17	1.40	1.35	-	-	0.04	<0.02	-	<0.02	-	0.05	-	<0.1	<0.02	<0.02	<0.02	0.10	<0.02
Source	0021_SW130	18 Oct 2023	0021_QC209_231018	335876	0.76	0.63	0.02	1.4	1.7	-	0.78	-	0.05	<0.02	-	0.03	-	0.06	-	0.02	<0.02	<0.05	0.01	0.13	<0.01
Source	0021_SW130	18 Oct 2023	0021_SW130_231018	ES2336399	0.62	0.44	0.02	1.06	1.30	1.24	-	-	0.04	<0.02	-	0.02	-	0.04	-	<0.1	<0.02	<0.02	<0.02	0.10	<0.02
Source	0021_SW130	11 Apr 2024	0021_SW130_240411	ES2412012	0.89	0.81	0.03	1.70	1.97	1.88	-	-	0.04	<0.02	-	0.03	-	0.06	-	<0.1	<0.02	<0.02	<0.02	0.11	<0.02
Source	0021_SW130	25 Oct 2024	0021_SW130_241025	ES2435541	4.58	16.2	1.42	20.8	28.4	24.5	-	-	0.66	<0.02	-	1.58	-	2.09	-	<0.1	<0.02	<0.02	0.33	1.12	<0.02
Source	0021_SW130	29 Jan 2025	0021_SW130_250129	ES2503552	2.23	1.78	0.04	4.01	4.51	4.25	-	-	0.10	<0.02	<0.02	0.07	0.03	0.16	-	<0.1	<0.02	<0.02	<0.02	0.10	<0.02
Source	0021_SW130	03 Apr 2025	0021_SW130_250403	ES2510623	1.43	1.00	0.04	2.43	2.99	2.87	-	-	0.06	<0.02	-	0.04	-	0.08	-	<0.1	<0.02	<0.02	0.03	0.25	<0.02
Source	0021_SW153	31 Aug 2021	0021_SW153_210831	ES2131665	4.64	4.27	0.19	8.91	10.8	10.2	-	-	0.25	<0.02	-	0.20	-	0.38	-	<0.1	<0.02	<0.02	0.08	0.66	<0.02
Source	0021_SW153	11 Nov 2021	0021_QC121_211111	EW2104861	14.6	6.67	0.26	21.3	24.0	23.2	-	-	0.32	0.03	-	0.38	-	0.34	-	<0.1	<0.02	<0.02	0.10	1.09	<0.02
Source	0021_SW153	11 Nov 2021	0021_SW153_211111221	EW2104861	14.7	6.30	0.27	21.0	23.9	23.0	-	-	0.39	<0.02	-	0.39	-	0.50	-	<0.1	<0.02	<0.02	0.11	1.03	<0.02
Source	0021_SW153	11 Nov 2021	0021_SW153_211111231	EW2104861	7.02	2.33	0.11	9.35	10.5	10.2	-	-	0.16	<0.02	-	0.14	-	0.20	-	<0.1	<0.02	<0.02	0.04	0.43	<0.02
Source	0021_SW153	12 Nov 2021	0021_QC122_211112	EW2104861	3.73	1.75	0.07	5.48	6.25	6.05	-	-	0.09	<0.02	-	0.09	-	0.11	-	<0.1	<0.02	<0.02	0.03	0.32	<0.02
Source	0021_SW153	12 Nov 2021	0021_QC221_211112	844059	3.1[#1]	1.1[#1]	0.05	4.2	4.72	4.55	3.15	4.25	0.05	<0.01	-	0.07[#1]	0.01	0.08[#1]	0.01[#1]	<0.05	<0.01	<0.01	0.02[#1]	0.20[#1]	<0.01
Source	0021_SW153	12 Nov 2021	0021_QC222_211112	844059	3.8[#1]	1.8[#1]	0.08	5.6	6.36	6.1	3.88	5.68	0.06	<0.01	-	0.11[#1]	0.02	0.11[#1]	0.02[#1]	<0.05	<0.01	<0.01	0.03[#1]	0.28[#1]	<0.01
Source	0021_SW153	12 Nov 2021	0021_SW153_211112001	EW2104861	7.17	2.76	0.12	9.93	11.2	10.9	-	-	0.17	<0.02	-	0.13	-	0.23	-	<0.1	<0.02	<0.02	0.05	0.53	<0.02
Source	0021_SW153	12 Nov 2021	0021_SW153_211112011	EW2104861	6.12	2.47	0.12	8.59	9.84	9.48	-	-	0.16	<0.02	-	0.14	-	0.22	-	<0.1	<0.02	<0.02	0.04	0.48	<0.02
Source	0021_SW153	12 Nov 2021	0021_SW153_211112021	EW2104861	5.20	2.52	0.11	7.72	8.97	8.62	-	-	0.17	<0.02	-	0.13	-	0.22	-	<0.1	<0.02	<0.02	0.04	0.49	<0.02
Source	0021_SW153	12 Nov 2021	0021_SW153_211112031	EW2104861	3.80	2.17	0.10	5.97	7.10	6.78	-	-	0.16	<0.02	-	0.13	-	0.19	-	<0.1	<0.02	<0.02	0.04	0.43	<0.02
Source	0021_SW153	12 Nov 2021	0021_SW153_211112041	EW2104861	3.43	2.08	0.09	5.51	6.49	6.21	-	-	0.13	<0.02	-	0.10	-	0.18	-	<0.1	<0.02	<0.02	0.03	0.38	<0.02
Source	0021_SW153	12 Nov 2021	0021_SW153_211112052	EW2104861	3.45	2.09	0.09	5.54	6.57	6.28	-	-	0.13	<0.02	-	0.11	-	0.18	-	<0.1	<0.02	<0.02	0.04	0.41	<0.02
Source	0021_SW153	12 Nov 2021	0021_SW153_211112062	EW2104861	3.62	2.09	0.09	5.71	6.73	6.44	-	-	0.13	<0.02	-	0.11	-	0.18	-	<0.1	<0.02	<0.02	0.04	0.40	<0.02
Source	0021_SW153	12 Nov 2021	0021_SW153_211112072	EW2104861	3.40	1.94	0.08	5.34	6.24	5.99	-	-	0.13	<0.02	-	0.09	-	0.16	-	<0.1	<0.02	<0.02	0.03	0.35	<0.02
Source	0021_SW153	12 Nov 2021	0021_SW153_211112082	EW2104861	2.81	1.51	0.07	4.32	5.06	4.85	-	-	0.10	<0.02	-	0.08	-	0.13	-	<0.1	<0.02	<0.02	0.03	0.28	<0.02
Source	0021_SW153	12 Nov 2021	0021_SW153_211112092	EW2104861	3.46	1.80	0.08	5.26	6.12	5.87	-	-	0.11	<0.02	-	0.10	-	0.15	-	<0.1	<0.02	<0.02	0.03	0.33	<0.02
Source	0021_SW153	12 Nov 2021	0021_SW153_211112102	EW2104861	2.98	1.62	0.07	4.60	5.39	5.17	-	-	0.11	<0.02	-	0.08	-	0.14	-	<0.1	<0.02	<0.02	0.03	0.30	<0.02
Source	0021_SW153	12 Nov 2021	0021_SW153_211112112	EW2104861	3.72	1.75	0.07	5.47	6.22	6.04	-	-	0.09	<0.02	-	0.09	-	0.09	-	<0.1	<0.02	<0.02	0.03	0.32	<0.02
Source	0021_SW153	12 Nov 2021	0021_SW153_211112122	EW2104861	4.18	1.74	0.07	5.92	6.69	6.50	-	-	0.09	<0.02	-	0.09	-	0.10	-	<0.1	<0.02	<0.02	0.03	0.34	<0.02
Source	0021_SW153	12 Nov 2021	0021_SW153_211112132	EW2104861	4.77	2.05	0.08	6.82	7.73	7.50	-	-	0.10	<0.02	-	0.11	-	0.12	-	<0.1	<0.02	<0.02	0.03	0.40	<0.02
Source	0021_SW153	12 Nov 2021	0021_SW153_211112143	EW2104861	4.90	2.14	0.09	7.04	7.97	7.72	-	-	0.10	<0.02	-	0.12	-	0.13	-	<0.1	<0.02	<0.02	0.03	0.40	<0.02
Source	0021_SW153	12 Nov 2021	0021_SW153_211112153	EW2104861	4.94	2.08	0.09	7.02	7.96	7.72	-	-	0.11	<0.02	-	0.11	-	0.13	-	<0.1	<0.02	<0.02	0.04	0.39	<0.02
Source	0021_SW153	12 Nov 2021	0021_SW153_211112163	EW2104861	5.47	2.34	0.10	7.81	8.83	8.58	-	-	0.12	<0.02	-	0.13	-	0.12	-	<0.1	<0.02	<0.02	0.04	0.44	<0.02
Source	0021_SW153	12 Nov 2021	0021_SW153_211112173	EW2104861	3.58	1.57	0.06	5.15	5.83	5.66	-	-	0.08	<0.02	-	0.08	-	0.09	-	<0.1	<0.02	<0.02	0.03	0.29	<0.02
Source	0021_SW153	12 Nov 2021	0021_SW153_211112183	EW2104861	4.49	2.20	0.09	6.69	7.64	7.42	-	-	0.11	<0.02	-	0.11	-	0.11	-	<0.1	<0.02	<0.02	0.04	0.42	<0.02
Source	0021_SW153	12 Nov 2021	0021_SW153_211112193	EW2104861	5.34	2.42	0.10	7.76	8.80	8.56	-	-	0.12	<0.02	-	0.12	-	0.12	-	<0.1	<0.02	<0.02	0.04	0.46	<0.02
Source	0021_SW153	12 Nov 2021	0021_SW153_211112203	EW2104861	4.87	2.26	0.09	7.13	8.13	7.89	-	-	0.11	<0.02	-	0.12	-	0.12	-	<0.1	<0.02	<0.02	0.04	0.45	<0.02
Source	0021_SW153	10 Dec 2021	0021_QC123_211210	ES2146373	8.35	4.00	0.20	12.4	14.5	13.9	-	-	0.28	<0.02	-	0.26	-	0.30	-	<0.1	<0.02	<0.02	0.09	0.87	<0.02
Source	0021_SW153	10 Dec 2021	0021_QC223_211210	852877	5.8[#1]	1.9[#1]	0.08[#1]	7.7	8.45	8.24	5.88	7.78	0.09[#1]	<0.01	-	0.08[#1]	0.02	0.11[#1]	<0.01	<0.05	<0.01	<0.01	0.03[#1]	0.28[#1]	<0.01
Source	0021_SW153	10 Dec 2021	0021_SW153_211210043	ES2146373	9.15	4.76	0.23	13.9	16.2	15.6	-	-	0.25	0.03	-	0.26	-	0.29	-	<0.1	<0.02	<0.02	0.10	0.93	<0.02
Source	0021_SW153	10 Dec 2021	0021_SW153_211210083	ES2146373	5.25	2.51	0.12	7.76	8.94	8.64	-	-	0.12	0.02	-	0.13	-	0.15	-	<0.1	<0.02	<0.02	0.05	0.50	<0.02
Source	0021_SW153	10 Dec 2021	0021_SW153_211210123	ES2146373	4.07	2.15	0.10	6.22	7.24	6.99	-	-	0.11	<0.02	-	0.12	-	0.13	-	<0.1	<0.02	<0.02	0.04	0.44	<0.02

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids							PFAS - Perfluoroalkyl Carbo					
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL					0.0001	0.0005	0.0005	0.0003	0.0003	0.0003	0.001	0.001	0.0005	0.0005	0.01	0.0005	0.001	0.0005	0.001	0.002	0.0005	0.0005	0.0005	0.0005	0.0005
PFAS NEMP 2025 Freshwater and Interim Marine 95%					0.13		220																		
PFAS NEMP 2025 Recreational water quality					2	2	10	2																	
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																					
Source	0021_SW153	10 Dec 2021	0021_SW153_211210163	ES2146373	1.82	0.90	0.04	2.72	3.12	3.01	-	-	0.05	<0.02	-	0.05	-	0.06	-	<0.1	<0.02	<0.02	<0.02	0.17	<0.02
Source	0021_SW153	10 Dec 2021	0021_SW153_211210203	ES2146373	1.72	0.81	0.03	2.53	2.88	2.79	-	-	0.04	<0.02	-	0.04	-	0.05	-	<0.1	<0.02	<0.02	<0.02	0.16	<0.02
Source	0021_SW153	11 Dec 2021	0021_QC124_211211	ES2146373	4.47	1.86	0.09	6.33	7.25	7.00	-	-	0.12	<0.02	-	0.12	-	0.13	-	<0.1	<0.02	<0.02	0.04	0.36	<0.02
Source	0021_SW153	11 Dec 2021	0021_QC224_211211	852877	6.3[#1]	2.0[#1]	0.08[#1]	8.3	9.05	8.8	6.38	8.38	0.10[#1]	<0.01	-	0.11[#1]	0.02	0.12[#1]	<0.01	<0.05	<0.01	<0.01	0.03[#1]	0.24[#1]	<0.01
Source	0021_SW153	11 Dec 2021	0021_SW153_211211003	ES2146373	2.27	1.14	0.05	3.41	3.92	3.79	-	-	0.06	<0.02	-	0.06	-	0.07	-	<0.1	<0.02	<0.02	0.02	0.21	<0.02
Source	0021_SW153	11 Dec 2021	0021_SW153_211211043	ES2146373	3.06	1.47	0.07	4.53	5.19	5.02	-	-	0.08	<0.02	-	0.08	-	0.09	-	<0.1	<0.02	<0.02	0.03	0.26	<0.02
Source	0021_SW153	11 Dec 2021	0021_SW153_211211084	ES2146373	3.70	1.64	0.07	5.34	6.08	5.89	-	-	0.09	<0.02	-	0.09	-	0.10	-	<0.1	<0.02	<0.02	0.04	0.30	<0.02
Source	0021_SW153	11 Dec 2021	0021_SW153_211211164	ES2146373	4.70	2.16	0.10	6.86	7.84	7.59	-	-	0.12	<0.02	-	0.12	-	0.13	-	<0.1	<0.02	<0.02	0.04	0.40	<0.02
Source	0021_SW153	11 Dec 2021	0021_SW153_211211204	ES2146373	5.51	2.45	0.10	7.96	9.06	8.76	-	-	0.13	<0.02	-	0.14	-	0.16	-	<0.1	<0.02	<0.02	0.05	0.44	<0.02
Source	0021_SW153	12 Dec 2021	0021_SW153_211212044	ES2146373	6.06	2.95	0.11	9.01	10.3	9.93	-	-	0.15	<0.02	-	0.16	-	0.19	-	<0.1	<0.02	<0.02	0.06	0.51	<0.02
Source	0021_SW153	12 Dec 2021	0021_SW153_211212084	ES2146373	6.23	3.16	0.12	9.39	10.8	10.4	-	-	0.17	<0.02	-	0.18	-	0.20	-	<0.1	<0.02	<0.02	0.05	0.56	<0.02
Source	0021_SW153	13 Dec 2021	0021_SW153_211213005	ES2146373	6.30	3.20	0.13	9.50	10.9	10.5	-	-	0.17	<0.02	-	0.19	-	0.20	-	<0.1	<0.02	<0.02	0.06	0.58	<0.02
Source	0021_SW153	13 Dec 2021	0021_SW153_211213125	ES2146373	7.84	4.28	0.17	12.1	14.1	13.6	-	-	0.24	0.02	-	0.25	-	0.27	-	<0.1	<0.02	<0.02	0.09	0.80	<0.02
Source	0021_SW153	22 Feb 2022	0021_QC102_202022	ES2206899	1.44	1.07	0.04	2.51	2.93	2.78	-	-	0.08	<0.02	-	0.04	-	0.11	-	<0.1	<0.02	<0.02	<0.02	0.15	<0.02
Source	0021_SW153	22 Feb 2022	0021_QC103_202022	ES2206899	1.10	0.76	0.03	1.86	2.17	2.06	-	-	0.06	<0.02	-	0.04	-	0.07	-	<0.1	<0.02	<0.02	<0.02	0.11	<0.02
Source	0021_SW153	22 Feb 2022	0021_QC202_220222	868765	1.3[#1]	1.2[#1]	0.03[#1]	2.5	2.97	2.84	1.33	2.53	0.09	<0.01	-	0.04[#1]	0.04	0.05[#1]	<0.01	<0.05	<0.01	<0.01	0.01[#1]	0.21	<0.01
Source	0021_SW153	22 Feb 2022	0021_QC203_220222	868765	1.0[#1]	0.91[#1]	0.02[#1]	1.91	2.27	2.16	1.02	1.93	0.06	<0.01	-	0.03[#1]	0.03	0.05[#1]	<0.01	<0.05	<0.01	<0.01	0.01[#1]	0.16	<0.01
Source	0021_SW153	22 Feb 2022	0021_SW153_220222005	ES2206899	6.03	2.72	0.17	8.75	10.7	9.92	-	-	0.29	0.02	-	0.32	-	0.42	-	<0.1	<0.02	<0.02	0.08	0.63	<0.02
Source	0021_SW153	22 Feb 2022	0021_SW153_220222015	ES2206899	3.71	2.33	0.09	6.04	7.02	6.68	-	-	0.16	<0.02	-	0.13	-	0.21	-	<0.1	<0.02	<0.02	0.05	0.34	<0.02
Source	0021_SW153	22 Feb 2022	0021_SW153_220222025	ES2206899	3.81	1.87	0.09	5.68	6.56	6.26	-	-	0.15	<0.02	-	0.13	-	0.17	-	<0.1	<0.02	<0.02	0.03	0.31	<0.02
Source	0021_SW153	22 Feb 2022	0021_SW153_220222035	ES2206899	2.40	1.18	0.05	3.58	4.12	3.95	-	-	0.08	<0.02	-	0.07	-	0.10	-	<0.1	<0.02	<0.02	0.02	0.22	<0.02
Source	0021_SW153	22 Feb 2022	0021_SW153_220222045	ES2206899	2.10	1.07	0.05	3.17	3.66	3.51	-	-	0.10	<0.02	-	0.06	-	0.09	-	<0.1	<0.02	<0.02	<0.02	0.19	<0.02
Source	0021_SW153	22 Feb 2022	0021_SW153_220222080	ES2206899	1.50	0.91	0.04	2.41	2.78	2.66	-	-	0.07	<0.02	-	0.04	-	0.08	-	<0.1	<0.02	<0.02	<0.02	0.14	<0.02
Source	0021_SW153	22 Feb 2022	0021_SW153_220222100	ES2206899	1.54	0.98	0.04	2.52	2.93	2.80	-	-	0.09	<0.02	-	0.04	-	0.09	-	<0.1	<0.02	<0.02	<0.02	0.15	<0.02
Source	0021_SW153	22 Feb 2022	0021_SW153_220222110	ES2206899	1.86	1.69	0.06	3.55	4.25	4.02	-	-	0.14	<0.02	-	0.07	-	0.16	-	<0.1	<0.02	<0.02	0.02	0.22	<0.02
Source	0021_SW153	22 Feb 2022	0021_SW153_220222141	ES2206899	1.99	1.59	0.06	3.58	4.26	4.03	-	-	0.12	<0.02	-	0.08	-	0.15	-	<0.1	<0.02	<0.02	0.03	0.24	<0.02
Source	0021_SW153	22 Feb 2022	0021_SW153_220222171	ES2206899	1.55	1.36	0.05	2.91	3.43	3.25	-	-	0.10	<0.02	-	0.06	-	0.12	-	<0.1	<0.02	<0.02	0.02	0.17	<0.02
Source	0021_SW153	22 Feb 2022	0021_SW153_220222201	ES2206899	1.07	0.77	0.03	1.84	2.15	2.05	-	-	0.06	<0.02	-	0.04	-	0.06	-	<0.1	<0.02	<0.02	<0.02	0.12	<0.02
Source	0021_SW153	23 Feb 2022	0021_SW153_220223002	ES2206899	1.37	0.72	0.03	2.09	2.34	2.26	-	-	0.05	<0.02	-	0.03	-	0.05	-	<0.1	<0.02	<0.02	<0.02	0.09	<0.02
Source	0021_SW153	08 Apr 2022	0021_SW153_220408	ES2212827	1.15	0.53	0.02	1.68	1.86	1.81	-	-	0.02	<0.02	-	0.02	-	0.03	-	<0.1	<0.02	<0.02	<0.02	0.09	<0.02
Source	0021_SW153	12 May 2022	0021_SW153_220512095	ES2216861	1.63	0.80	0.04	2.43	2.74	2.64	-	-	0.03	<0.02	-	0.04	-	0.06	-	<0.1	<0.02	<0.02	<0.02	0.12	<0.02
Source	0021_SW153	12 May 2022	0021_SW153_220512105	ES2216861	1.74	0.88	0.04	2.62	2.98	2.87	-	-	0.04	<0.02	-	0.05	-	0.06	-	<0.1	<0.02	<0.02	0.02	0.13	<0.02
Source	0021_SW153	12 May 2022	0021_SW153_220512115	ES2216861	2.07	0.97	0.05	3.04	3.45	3.33	-	-	0.05	<0.02	-	0.06	-	0.06	-	<0.1	<0.02	<0.02	0.02	0.15	<0.02
Source	0021_SW153	12 May 2022	0021_SW153_220512125	ES2216861	1.90	0.91	0.05	2.81	3.21	3.09	-	-	0.05	<0.02	-	0.05	-	0.07	-	<0.1	<0.02	<0.02	0.02	0.14	<0.02
Source	0021_SW153	12 May 2022	0021_SW153_220512135	ES2216861	2.14	0.91	0.05	3.05	3.45	3.32	-	-	0.04	<0.02	-	0.06	-	0.07	-	<0.1	<0.02	<0.02	0.02	0.14	<0.02
Source	0021_SW153	12 May 2022	0021_SW153_220512145	ES2216861	2.03	0.89	0.05	2.92	3.30	3.19	-	-	0.04	<0.02	-	0.05	-	0.06	-	<0.1	<0.02	<0.02	0.02	0.14	<0.02
Source	0021_SW153	12 Oct 2022	0021_SW153_221012	ES2237106	3.71	2.19	0.12	5.90	6.93	6.61	-	-	0.11	<0.02	-	0.13	-	0.19	-	<0.1	<0.02	<0.02	0.05	0.36	<0.02
Source	0021_SW153	20 Apr 2023	0021_QC112_230420	ES2313364	4.54	2.96	0.14	7.50	8.92	8.50	-	-	0.20	<0.02	-	0.15	-	0.27	-	<0.1	<0.02	<0.02	0.07	0.49	<0.02
Source	0021_SW153	20 Apr 2023	0021_QC212_230420	321517	4.7	3.5	0.15	8.2	9.7	-	4.8	-	0.18	<0.02	-	0.18	-	0.30	-	0.05	<0.02	<0.05	0.06	0.54	<0.01
Source	0021_SW153	20 Apr 2023	0021_SW153_230420	ES2313364	4.01	3.34	0.12	7.35	8.47	8.02	-	-	0.11	<0.02	-	0.14	-	0.31	-	<0.1	<0.02	<0.02	0.07	0.28	<0.02
Source	0021_SW153	18 Oct 2023	0021_QC107_231018	ES2336399	1.28	1.44	0.06	2.72	3.44	3.23	-	-	0.10	<0.02	-	0.05	-	0.16	-	<0.1	<0.02	<0.02	0.03	0.28	<0.02
Source	0021_SW153	18 Oct 2023	0021_QC207_231018	335876	1.4	1.7	0.09	3.1	4.2	-	1.5	-	0.14	<0.02	-	0.08	-	0.19	-	0.05	<0.02	<0.05	0.04	0.38	<0.01
Source	0021_SW153	18 Oct 2023	0021_SW153_231018	ES2336399	1.47	1.29	0.06	2.76	3.46	3.25	-	-	0.09	<0.02	-	0.06	-	0.15	-	<0.1	<0.02	<0.02	0.03	0.26	<0.02
Source	0021_SW153	10 Apr 2024	0021_SW153_240410	ES2412012	3.62	2.62	0.08	6.24	7.15	6.82	-	-	0.12	<0.02	-	0.10	-	0.19	-	<0.1	<0.02	<0.02	0.04	0.30	<0.02
Source	0021_SW153	31 Mar 2025	0021_QC102_250331	ES2510113	1.36	0.68	0.02	2.04	2.24	2.17	-	-	0.03	<0.02	-	0.03	-	0.04	-	<0.1	<0.02	<0.02	<0.02	0.08	<0.02
Source	0021_SW153	31 Mar 2025	0021_QC202_250331	1210052	1.7	0.74	0.03	2.44	2.72	2.63	1.73	2.47	0.04	<0.01	<0.01	0.04	<0.01	0.05	-	<0.05	<0.01	<0.01	<0.01	0.10	<0.01
Source	0021_SW153	31 Mar 2025	0021_SW153_250331	ES2510623	1.16	0.69	0.02	1.85	2.07	2.00	-	-	0.03	<0.02	-	0.03	-	0.04	-	<0.1	<0.02	<0.02	<0.02	0.08	<0.02
Pathway	0021_MW021	01 May 2017	MW021	ES1710866	<0.0003	0.0016	<0.0005	0.0016	0.0021	0.0016	-	-	<0.0005	<0.0005	-	<0.0005	-	0.0005	-	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Pathway	0021_MW021	25 Oct 2024	0021_MW021_241025	ES2435541	0.05	0.02	<0.01	0.07	0.07	0.07	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Pathway	0021_MW021	25 Oct 2024	0021_QC161_241025	ES2435541	<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
Pathway	0021_MW021	25 Oct 2024	0021_QC261_241025	1156146	<0.01	<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	-	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01
Pathway	0021_MW021	01 Apr 2025	0021_MW021_250401	ES2510113	<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
Pathway	0021_MW060	23 Jun 2021	0021_MW060_210623	ES2123994	0.03	0.08	<0.01	0.11	0.11	0.11	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Pathway	0021_MW060	22 Nov 2021	0021_MW060_211122	ES2142514	0.02	0.01	<0.01	0.03	0.03	0.03	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Pathway	0021_MW060	25 Oct 2024	0021_MW060_241025	ES2435541	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
Pathway	0021_MW060	30 Jan 2025	0021_MW060_250130	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	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Pathway	0021_MW060	01 Apr 2025	0021_MW060_250401	ES2510113	0.03	<0.01	<0.01	0.03	0.03	0.03	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Pathway	0021_MW070	23 Jun 2021	0021_MW070_210623	ES2123994	66.5	5.90	0.41	72.4	75.0	73.7	-	-	0.22	<0.02	-	0.87	-	0.38	-	<0.1	<0.02	<0.02	0.08	0.50	<0.02
Pathway	0021_MW070	22 Nov 2021	0021_QC202_211122	845848	51[#1]	3.8[#1]	0.22[#1]	54.8	56.54	55.79	51.22	55.02	0.20	<0.01	-	0.47[#1]	0.07	0.21[#1]	<0.01	0.08	<0.01	<0.01	0.07[#1]	0.35	<0.01
Pathway	0021_MW070	23 Nov 2021	0021_MW070_211123	ES2142514	69.5	5.30	0.31	74.8	77.4	76.3	-	-	0.28	<0.02	-	0.70	-	0.42	-	<0.1	<0.02	<0.02	0.09	0.77	<0.02
Pathway	0021_MW070	25 Oct 2024	0021_MW070_241025	ES2435541	36.2	3.51	0.29	39.7	41.3	40.5	-	-	0.10	<0.02	-	0.48	-	0.14	-	<0.1	<0.02	<0.02	0.04	0.30	<0.02
Pathway	0021_MW070	30 Jan 2025	0021_MW070_250130	ES2503552	28.4	3.96	0.25	32.4	34.0	33.2	-	-	0.10	<0.02	0.09	0.48	0.04	0.21	-	<0.1	<0.02	<0.02	0.06	0.32	<0.02
Pathway	0021_MW070	07 Apr 2025	0021_MW070_250407	ES2510113	40.4	5.92	0.30	46.3	48.4	47.3	-	-	0.11	<0.02	-	0.71	-	0.27	-	<0.1	<0.02	<0.02	0.08	0.40	<0.02
Pathway	0021_MW071	23 Jun 2021	0021_MW071_210623	ES2123994	0.41	2.11	0.08	2.52	3.71	3.36	-	-	0.24	<0.02	-	0.07	-	0.28	-	<0.1	<0.02	<0.02	0.05	0.39	<0.02
Pathway	0021_MW071	23 Nov 2021	0021_MW071_211123	ES2142514	0.37	2.58	0.09	2.95	4.63	4.15	-	-	0.36	<0.02	-	0.07	-	0.41	-	<0.1	<0.02	<0.02	0.06	0.61	<0.02
Pathway	0021_MW071	23 Nov 2021	0021_QC102_211123	ES2142514	0.47	2.84	0.10	3.31	5.16	4.64	-	-	0.39	<0.02	-	0.08	-	0.44	-	<0.1	<0.02	<0.02	0.07	0.67	<0.02

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids							PFAS - Perfluoroalkyl Carbo					
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL					0.0001	0.0005	0.0005	0.0003	0.0003	0.0003	0.001	0.001	0.0005	0.0005	0.01	0.0005	0.001	0.0005	0.001	0.002	0.0005	0.0005	0.0005	0.0005	0.0005
PFAS NEMP 2025 Freshwater and Interim Marine 95%					0.13		220																		
PFAS NEMP 2025 Recreational water quality					2	2	10	2																	
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																					
Pathway	0021_MW071	25 Oct 2024	0021_MW071_241025	ES2435541	0.12	0.47	0.02	0.59	0.93	0.84	-	-	0.08	<0.02	-	<0.02	-	0.05	-	<0.1	<0.02	<0.02	<0.02	0.13	<0.02
Pathway	0021_MW071	30 Jan 2025	0021_MW071_250130	ES2503552	0.83	2.84	0.11	3.67	5.31	4.71	-	-	0.27	<0.02	<0.02	0.09	0.13	0.38	-	<0.1	<0.02	<0.02	0.07	0.49	<0.02
Pathway	0021_MW071	07 Apr 2025	0021_MW071_250407	ES2510113	0.50	2.12	0.09	2.62	3.93	3.45	-	-	0.23	<0.02	-	0.07	-	0.31	-	<0.1	<0.02	<0.02	0.06	0.37	<0.02
Pathway	0021_MW072	23 Jun 2021	0021_MW072_210623	ES2123994	18.7	6.63	0.59	25.3	28.5	27.3	-	-	0.33	<0.02	-	0.58	-	0.57	-	<0.1	<0.02	<0.02	0.14	0.81	<0.02
Pathway	0021_MW072	23 Nov 2021	0021_MW072_211123	ES2142514	24.2	8.73	0.64	32.9	37.0	35.4	-	-	0.43	<0.02	-	0.83	-	0.78	-	<0.1	<0.02	<0.02	0.14	1.13	<0.02
Pathway	0021_MW072	25 Oct 2024	0021_MW072_241025	ES2435541	19.2	7.89	0.59	27.1	30.1	28.8	-	-	0.26	<0.02	-	0.74	-	0.45	-	<0.1	<0.02	<0.02	0.12	0.67	<0.02
Pathway	0021_MW072	30 Jan 2025	0021_MW072_250130	ES2503552	20.7	9.43	0.58	30.1	33.6	32.0	-	-	0.25	<0.02	0.02	0.83	0.11	0.58	-	<0.1	<0.02	<0.02	0.13	0.83	<0.02
Pathway	0021_MW072	07 Apr 2025	0021_MW072_250407	ES2510113	18.1	7.35	0.52	25.4	28.3	27.0	-	-	0.23	<0.02	-	0.80	-	0.43	-	<0.1	<0.02	<0.02	0.11	0.56	<0.02
Pathway	0021_MW112	28 Apr 2017	B_MW03	ES1710200	0.0053	0.0195	<0.0005	0.0248	0.0328	0.0313	-	-	0.0025	<0.0005	-	<0.0005	-	0.0015	-	<0.002	<0.0005	<0.0005	<0.0005	0.0027	<0.0005
Pathway	0021_MW112	24 Jun 2021	0021_MW112_210624	ES2123994	0.01	<0.02	<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
Pathway	0021_MW112	20 Oct 2021	0021_MW112_211020	ES2138639	<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
Pathway	0021_MW112	23 Nov 2021	0021_MW112_211123	ES2142514	<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
Pathway	0021_MW112	07 Apr 2022	0021_MW112_220407	ES2212442	<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
Pathway	0021_MW112	07 Apr 2022	0021_QC210_220407	293031	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.01	<0.02	-	<0.01	-	<0.01	-	<0.02	<0.02	<0.05	<0.01	<0.01	<0.01
Pathway	0021_MW112	12 Oct 2022	0021_MW112_221012	ES2237106	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
Pathway	0021_MW112	18 Apr 2023	0021_MW112_230418	ES2313364	<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
Pathway	0021_MW112	16 Oct 2023	0021_MW112_231016	ES2336398	<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
Pathway	0021_MW112	08 Apr 2024	0021_MW112_240408	ES2411994	<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
Pathway	0021_MW112	24 Oct 2024	0021_MW112_241024	ES2435541	<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
Pathway	0021_MW112	30 Jan 2025	0021_MW112_250130	ES2503552	0.17	0.01	<0.01	0.18	0.62	0.62	-	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Pathway	0021_MW112	01 Apr 2025	0021_MW112_250401	ES2510113	<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
Pathway	0021_MW112	01 Apr 2025	0021_QC154_250401	ES2510113	<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
Pathway	0021_MW113	28 Apr 2017	B_MW04	ES1710200	0.0189	0.0477	0.0005	0.0666	0.0856	0.0805	-	-	0.0046	<0.0005	-	0.0010	-	0.0041	-	<0.002	<0.0005	<0.0005	<0.0005	0.0055	<0.0005
Pathway	0021_MW113	02 May 2018	B_MW04_180502	ES1812871	<0.01	<0.02	<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
Pathway	0021_MW113	23 Jun 2021	0021_MW113_210623	ES2123994	0.02	<0.02	<0.01	0.02	0.02	0.02	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Pathway	0021_MW113	20 Oct 2021	0021_MW113_211020	ES2138639	<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
Pathway	0021_MW113	23 Nov 2021	0021_MW113_211123	ES2142514	0.03	0.05	<0.01	0.08	0.08	0.08	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Pathway	0021_MW113	07 Apr 2022	0021_MW113_220407	ES2212442	0.02	0.03	<0.01	0.05	0.05	0.05	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Pathway	0021_MW113	13 Oct 2022	0021_MW113_221013	ES2237106	0.06	0.05	<0.01	0.11	0.11	0.11	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Pathway	0021_MW113	19 Apr 2023	0021_MW113_230419	ES2313364	0.05	0.06	<0.01	0.11	0.11	0.11	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Pathway	0021_MW113	18 Oct 2023	0021_MW113_231018	ES2336398	<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
Pathway	0021_MW113	10 Apr 2024	0021_MW113_240410	ES2411994	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
Pathway	0021_MW113	24 Oct 2024	0021_MW113_241024	ES2435541	0.02	0.01	<0.01	0.03	0.03	0.03	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Pathway	0021_MW113	24 Oct 2024	0021_QC109_241024	ES2435541	<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
Pathway	0021_MW113	24 Oct 2024	0021_QC209_241024	1156160	<0.01	<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	-	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01
Pathway	0021_MW113	30 Jan 2025	0021_MW113_250130	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	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Pathway	0021_MW113	30 Jan 2025	0021_MW113_250130	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	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Pathway	0021_MW113	07 Apr 2025	0021_MW113_250407	ES2510113	0.04	<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
Pathway	0021_MW133	11 Apr 2018	MC_MW04_180411	ES1810721	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	<0.0003	-	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	-	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Pathway	0021_MW133	02 May 2018	MC_MW04_180502	ES1812871	<0.01	<0.02	<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
Pathway	0021_MW133	11 Oct 2022	0021_MW133_221012	ES2237106	<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
Pathway	0021_MW133	18 Apr 2023	0021_MW133_230418	ES2313364	<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
Pathway	0021_MW133	17 Oct 2023	0021_MW133_231017	ES2336398	<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
Pathway	0021_MW133	09 Apr 2024	0021_MW133_240409	ES2411994	<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
Pathway	0021_MW133	23 Oct 2024	0021_MW133_241023	ES2435078	<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
Pathway	0021_MW133	02 Apr 2025	0021_MW133_250402	ES2510113	<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
Pathway	0021_SW010	12 Apr 2017	B_SW01	ES1709064	3.07	1.87	0.0824	4.94	5.62	5.27	-	-	0.108	0.0088	-	0.135	-	0.193	-	<0.002	0.0014	<0.0005	0.0211	0.110	0.0013
Pathway	0021_SW010	01 May 2018	B_SW01_180501	ES1812871	4.15	4.03	0.152	8.18	9.57	8.99	-	-	0.239	0.0033	-	0.188	-	0.394	-	<0.002	<0.0005	<0.0005	0.0681	0.314	0.0014
Pathway	0021_SW010	20 Oct 2021	0021_SW010_211020	ES2138639	3.30	2.57	0.09	5.87	6.92	6.51	-	-	0.18	<0.02	-	0.11	-	0.30	-	<0.1	<0.02	<0.02	0.04	0.30	<0.02
Pathway	0021_SW010	22 Nov 2021	0021_SW010_211122	ES2142514	0.60	0.74	0.02	1.34	1.55	1.49	-	-	0.05	<0.02	-	<0.02	-	0.06	-	<0.1	<0.02	<0.02	<0.02	0.08	<0.02
Pathway	0021_SW010	07 Apr 2022	0021_SW010_220407	ES2212442	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
Pathway	0021_SW010	12 May 2022	0021_SW010_220512	ES2216861	0.13	0.05	<0.01	0.18	0.18	0.18	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Pathway	0021_SW010	12 Oct 2022	0021_SW010_221012	ES2237106	4.79	1.70	0.09	6.49	7.23	7.01	-	-	0.08	<0.02	-	0.11	-	0.11	-	<0.1	<0.02	<0.02	0.04	0.26	<0.02
Pathway	0021_SW010	02 Feb 2023	0021_SW010_230202	ES2303445	0.12	0.10	<0.01	0.22	0.22	0.22	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Pathway	0021_SW010	09 Mar 2023	0021_SW010_230309	ES2308203	0.19	0.07	<0.01	0.26	0.26	0.26	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Pathway	0021_SW010	19 Apr 2023	0021_SW010_230419	ES2313364	0.19	0.10	<0.01	0.29	0.29	0.29	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Pathway	0021_SW010	01 May 2023	0021_SW010_230501	ES2314437	0.19	0.11	<0.01	0.30	0.30	0.30	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Pathway	0021_SW010	06 Jun 2023	0021_QC100_230606	ES2319084	1.23	1.09	0.03	2.32	2.61	2.47	-	-	0.06	<0.02	-	0.04	-	0.10	-	<0.1	<0.02	<0.02	<0.02	0.06	<0.02
Pathway	0021_SW010	06 Jun 2023	0021_SW010_230606	ES2319084	0.74	0.81	0.02	1.55	1.73	1.64	-	-	0.04	<0.02	-	0.02	-	0.07	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02
Pathway	0021_SW010	08 Aug 2023	0021_SW010_230808	ES2326813	2.64	1.71	0.05	4.35	4.90	4.62	-	-	0.15	<0.02	-	0.08	-	0.20	-	<0.1	<0.02	<0.02	<0.02	0.07	<0.02
Pathway	0021_SW010	12 Dec 2023	0021_SW010_231212	ES2343587	10.2	3.52	0.20	13.7	15.0	14.5	-	-	0.10	<0.02	-	0.30	-	0.22	-	<0.1	<0.02	<0.02	0.07	0.34	<0.02
Pathway	0021_SW010	10 Apr 2024	0021_SW010_240410	ES2412012	0.21	0.20	<0.01	0.41	0.41	0.41	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Pathway	0021_SW010	30 Jan 2025	0021_SW010_250130	ES2503552	1.23	2.17	0.04	3.40	4.05	3.68	-	-	0.17	<0.02	<0.02	0.05	0.06	0.26	-	<0.1	<0.02	<0.02	0.02	0.05	<0.02
Pathway	0021_SW010	04 Apr 2025	0021_SW010_250404	ES2510622	4.77	2.17	0.10	6.94	7.62	7.36	-	-	0.07	<0.02	-	0.12	-	0.12	-	<0.1	<0.02	<0.02	0.02	0.19	<0.02
Pathway	0021_SW018	13 Apr 2017	DC_SW03	ES1709064	0.0654	0.217	0.0021	0.282	0.340	0.312	-	-	0.0183	<0.0005	-	0.0041	-	0.0237	-	<0.002	<0.0005	<0.0005	0.0011	0.0084	<0.0005
Pathway	0021_SW018	20 Oct 2021	0021_SW018_211020	ES2138639	0.10	0.10	<0.01	0.20	0.20	0.20	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Pathway	0021_SW018	06 Apr 2022	0021_QC106_220406	ES2212442	0.02	0.02	<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

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids							PFAS - Perfluoroalkyl Carbo					
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	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	0.001	0.0005	0.001	0.002	0.0005	0.0005	0.0005	0.0005	0.0005
PFAS NEMP 2025 Freshwater and Interim Marine 95%					0.13		220																		
PFAS NEMP 2025 Recreational water quality					2	2	10	2																	
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																					
Pathway	0021_SW018	06 Apr 2022	0021_SW018_220406	ES2212442	0.01	0.01	<0.01	0.02	0.02	0.02	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Pathway	0021_SW018	14 Oct 2022	0021_QC207_221014	308187	0.02	0.07	<0.01	0.09	0.09	-	0.02	-	<0.01	<0.02	-	<0.01	-	<0.01	-	<0.02	<0.02	<0.05	<0.01	<0.01	<0.01
Pathway	0021_SW018	14 Oct 2022	0021_SW018_221014	ES2237106	0.01	0.08	<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
Pathway	0021_SW018	21 Apr 2023	0021_SW018_230421	ES2313364	<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
Pathway	0021_SW018	19 Oct 2023	0021_SW018_231019	ES2336399	0.09	0.13	<0.01	0.22	0.22	0.22	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Pathway	0021_SW018	02 Apr 2025	0021_SW018_250402	ES2510622	0.03	0.13	<0.01	0.16	0.16	0.16	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Pathway	0021_SW044	23 Mar 2018	MC_SW02_180323	ES1809241	0.562	0.446	0.0205	1.01	1.13	1.07	-	-	0.0115	0.0030	-	0.0260	-	0.0273	-	<0.002	<0.0005	<0.0005	0.0042	0.0293	<0.0005
Pathway	0021_SW044	30 Apr 2018	MC_SW02_180430	ES1812871	1.48	2.95	0.101	4.43	5.22	4.84	-	-	0.147	<0.0020[#2]	-	0.0940	-	0.291	-	<0.002	<0.0020[#2]	<0.0020[#2]	0.0306	0.120	<0.0020[#2]
Pathway	0021_SW044	12 May 2022	0021_SW044_220512	ES2216861	0.54	0.21	<0.01	0.75	0.77	0.77	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02
Pathway	0021_SW044	11 Oct 2022	0021_SW044_221011	ES2237106	0.25	0.09	<0.01	0.34	0.34	0.34	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Pathway	0021_SW044	18 Apr 2023	0021_SW044_230418	ES2313364	0.43	0.24	0.01	0.67	0.68	0.68	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Pathway	0021_SW044	17 Oct 2023	0021_SW044_231017	ES2336399	0.35	0.33	0.01	0.68	0.74	0.71	-	-	<0.02	<0.02	-	<0.02	-	0.03	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02
Pathway	0021_SW044	09 Apr 2024	0021_QC203_240409	348825	1.7	0.87	0.04	2.6	2.8	-	1.7	-	0.03	<0.02	-	0.06	-	0.04	-	<0.02	<0.02	<0.05	0.01	0.04	<0.01
Pathway	0021_SW044	09 Apr 2024	0021_SW044_240409	ES2412012	1.23	0.67	0.02	1.90	2.05	1.97	-	-	0.02	<0.02	-	0.04	-	0.04	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02
Pathway	0021_SW044	28 Oct 2024	0021_SW044_241028	ES2435541	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	<0.02	<0.02
Pathway	0021_SW044	01 Apr 2025	0021_SW044_250401	ES2510622	1.02	0.62	0.02	1.64	1.76	1.69	-	-	<0.02	<0.02	-	0.03	-	0.04	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02
Pathway	0021_SW045	23 Mar 2018	MC_SW03_180323	ES1809241	0.0181	0.0193	0.0006	0.0374	0.0404	0.0394	-	-	0.0006	<0.0005	-	<0.0005	-	0.0010	-	<0.002	<0.0005	<0.0005	<0.0005	0.0008	<0.0005
Pathway	0021_SW045	30 Apr 2018	MC_SW03_180430	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]	-	<0.002	<0.0020[#2]	<0.0020[#2]	<0.0020[#2]	<0.0020[#2]	<0.0020[#2]
Pathway	0021_SW045	12 May 2022	0021_SW045_220512	ES2216861	0.01	0.02	<0.01	0.03	0.03	0.03	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Pathway	0021_SW045	11 Oct 2022	0021_SW045_221011	ES2237106	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
Pathway	0021_SW045	18 Apr 2023	0021_SW045_230418	ES2313364	<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
Pathway	0021_SW045	17 Oct 2023	0021_QC102_231017	ES2336399	<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
Pathway	0021_SW045	17 Oct 2023	0021_QC202_231017	335876	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.01	<0.02	-	<0.01	-	<0.01	-	<0.02	<0.02	<0.05	<0.01	<0.01	<0.01
Pathway	0021_SW045	17 Oct 2023	0021_SW045_231017	ES2336399	<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
Pathway	0021_SW045	09 Apr 2024	0021_SW045_240409	ES2412012	0.02	0.03	<0.01	0.05	0.05	0.05	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Pathway	0021_SW045	23 Oct 2024	0021_SW045_241023	ES2435078	<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
Pathway	0021_SW045	01 Apr 2025	0021_SW045_250401	ES2510622	0.02	0.02	<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
Pathway	0021_SW048	06 Apr 2018	MC_SW06_180406	ES1810551	0.0140	0.0097	<0.0005	0.0237	0.0248	0.0242	-	-	<0.0005	<0.0005	-	<0.0005	-	0.0006	-	<0.002	<0.0005	<0.0005	<0.0005	0.0005	<0.0005
Pathway	0021_SW048	12 Oct 2022	0021_SW048_221012	ES2237106	0.21	0.01	<0.01	0.22	0.22	0.22	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Pathway	0021_SW048	19 Apr 2023	0021_SW048_230419	ES2313364	0.18	0.08	<0.01	0.26	0.26	0.26	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Pathway	0021_SW048	18 Oct 2023	0021_SW048_231017	ES2336399	0.02	<0.01	<0.01	0.02	0.02	0.02	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Pathway	0021_SW048	10 Apr 2024	0021_SW048_240410	ES2412012	0.03	0.06	<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
Pathway	0021_SW048	25 Oct 2024	0021_SW048_241025	ES2435541	0.02	0.01	<0.01	0.03	0.03	0.03	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Pathway	0021_SW048	03 Apr 2025	0021_SW048_250403	ES2510622	0.01	0.03	<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
Pathway	0021_SW053	30 Apr 2018	MC_SW11_180430	ES1812871	2.36	4.23	0.135	6.59	7.66	7.13	-	-	0.174	0.0024	-	0.145	-	0.385	-	<0.002	<0.0020[#2]	<0.0020[#2]	0.0448	0.176	<0.0020[#2]
Pathway	0021_SW053	12 May 2022	0021_SW053_220512	ES2216861	1.25	0.44	0.02	1.69	1.81	1.75	-	-	<0.02	<0.02	-	0.03	-	0.03	-	<0.1	<0.02	<0.02	<0.02	0.04	<0.02
Pathway	0021_SW053	11 Oct 2022	0021_SW053_221011	ES2237106	0.75	0.26	0.02	1.01	1.07	1.07	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	0.04	<0.02
Pathway	0021_SW053	02 Feb 2023	0021_SW053_230202	ES2303445	1.28	2.42	0.06	3.70	4.15	3.88	-	-	0.09	<0.02	-	0.10	-	0.17	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02
Pathway	0021_SW053	09 Mar 2023	0021_QC200_230309	972744	1.2[#1]	1.3[#1]	0.05[#1]	2.5	2.79	2.67	1.25	2.55	0.04	<0.01	<0.01	0.05	0.01	0.06	-	<0.05	<0.01	<0.01	0.01[#1]	0.07[#1]	<0.01
Pathway	0021_SW053	09 Mar 2023	0021_SW053_230309	ES2308203	1.01	1.00	0.04	2.01	2.32	2.15	-	-	0.04	<0.02	-	0.10	-	0.07	-	<0.1	<0.02	<0.02	<0.02	0.06	<0.02
Pathway	0021_SW053	18 Apr 2023	0021_QC101_230418	ES2313364	0.93	0.70	0.02	1.63	1.74	1.67	-	-	<0.02	<0.02	-	0.03	-	0.04	-	<0.1	<0.02	<0.02	<0.02	0.02	<0.02
Pathway	0021_SW053	18 Apr 2023	0021_QC201_230418	321517	1.0	0.69	0.03	1.7	1.9	-	1.0	-	0.02	<0.02	-	0.05	-	0.04	-	<0.02	<0.02	<0.05	<0.01	0.05	<0.01
Pathway	0021_SW053	18 Apr 2023	0021_SW053_230418	ES2313364	0.91	0.48	0.03	1.39	1.52	1.46	-	-	<0.02	<0.02	-	0.03	-	0.03	-	<0.1	<0.02	<0.02	<0.02	0.04	<0.02
Pathway	0021_SW053	01 May 2023	0021_SW053_230501	ES2314437	<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
Pathway	0021_SW053	06 Jun 2023	0021_QC200_230606	998496	0.55[#1]	0.47[#1]	0.02[#1]	1.02	1.17	1.12	0.57	1.04	0.02	<0.01	<0.01	0.02[#1]	<0.01	0.03[#1]	-	<0.05	<0.01	<0.01	<0.01	0.05	<0.01
Pathway	0021_SW053	06 Jun 2023	0021_SW053_230606	ES2319084	0.67	0.59	0.02	1.26	1.41	1.34	-	-	<0.02	<0.02	-	0.03	-	0.04	-	<0.1	<0.02	<0.02	<0.02	0.06	<0.02
Pathway	0021_SW053	08 Aug 2023	0021_QC200_230808	1016825	0.92	1.4	0.05	2.32	2.68	2.48	0.97	2.37	0.07	<0.01	<0.01	0.06	0.02	0.12	-	<0.05	<0.01	<0.01	0.01	0.03	<0.01
Pathway	0021_SW053	08 Aug 2023	0021_SW053_230808	ES2326813	0.95	1.40	0.04	2.35	2.70	2.49	-	-	0.07	<0.02	-	0.07	-	0.14	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02
Pathway	0021_SW053	17 Oct 2023	0021_SW053_231017	ES2336399	0.54	0.54	0.02	1.08	1.22	1.15	-	-	0.02	<0.02	-	0.03	-	0.04	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02
Pathway	0021_SW053	12 Dec 2023	0021_QC100_231212	ES2343587	1.21	0.95	0.05	2.16	2.44	2.32	-	-	0.03	<0.02	-	0.06	-	0.06	-	<0.1	<0.02	<0.02	<0.02	0.08	<0.02
Pathway	0021_SW053	12 Dec 2023	0021_SW053_231212	ES2343587	1.17	0.90	0.05	2.07	2.34	2.22	-	-	0.03	<0.02	-	0.06	-	0.06	-	<0.1	<0.02	<0.02	<0.02	0.07	<0.02
Pathway	0021_SW053	09 Apr 2024	0021_QC103_240409	ES2412012	1.73	1.08	0.04	2.81	3.05	2.93	-	-	0.04	<0.02	-	0.06	-	0.06	-	<0.1	<0.02	<0.02	<0.02	0.04	<0.02
Pathway	0021_SW053	09 Apr 2024	0021_SW053_240409	ES2412012	1.66	0.96	0.04	2.62	2.85	2.74	-	-	0.03	<0.02	-	0.06	-	0.05	-	<0.1	<0.02	<0.02	<0.02	0.05	<0.02
Pathway	0021_SW053	23 Oct 2024	0021_SW053_241023	ES2435078	0.38	0.20	<0.01	0.58	0.58	0.58	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Pathway	0021_SW053	29 Jan 2025	0021_QC100_250129	ES2503552	0.99	1.63	0.05	2.62	2.98	2.79	-	-	0.06	<0.02	<0.02	0.07	<0.02	0.12	-	<0.1	<0.02	<0.02	<0.02	0.06	<0.02
Pathway	0021_SW053	29 Jan 2025	0021_QC200_250129	1187025	2.7[#1]	2.8[#1]	0.09[#1]	5.5	6.11	5.8	2.79	5.59	0.08	<0.01	<0.01	0.13[#1]	0.02	0.16[#1]	-	<0.05	<0.01	<0.01	0.02	0.09	<0.01
Pathway	0021_SW053	29 Jan 2025	0021_SW053_250129	ES2503552	1.15	1.61	0.05	2.76	3.11	2.93	-	-	0.06	<0.02	<0.02	0.06	<0.02	0.12	-	<0.1	<0.02	<0.02	<0.02	0.06	<0.02

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids							PFAS - Perfluoroalkyl Carbo					
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	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	0.001	0.0005	0.001	0.002	0.0005	0.0005	0.0005	0.0005	0.0005
PFAS NEMP 2025 Freshwater and Interim Marine 95%					0.13		220																		
PFAS NEMP 2025 Recreational water quality					2	2	10	2																	
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																					
Pathway	0021_SW053	01 Apr 2025	0021_SW053_250401	ES2510622	1.29	0.85	0.03	2.14	2.32	2.23	-	-	0.02	<0.02	-	0.05	-	0.04	-	<0.1	<0.02	<0.02	<0.02	0.04	<0.02
Receptor	0021_SW012	11 Apr 2017	B_SW03	ES1708884	7.07	3.85	0.236	10.9	12.7	12.2	-	-	0.233	0.0116	-	0.203	-	0.334	-	<0.002	0.0024	<0.0005	0.0562	0.582	0.0006
Receptor	0021_SW043	20 Mar 2018	MC_SW01_180320	ES1808818	0.886	0.803	0.0225	1.69	1.90	1.79	-	-	0.0305	<0.0005	-	0.0437	-	0.0669	-	<0.002	<0.0005	<0.0005	0.0075	0.0376	<0.0005
Receptor	0021_SW043	01 May 2018	MC_SW01_180501	ES1812871	1.60	2.83	0.0844	4.43	5.16	4.81	-	-	0.137	<0.0020[#2]	-	0.0998	-	0.254	-	<0.002	<0.0020[#2]	<0.0020[#2]	0.0304	0.116	<0.0020[#2]
Receptor	0021_SW043	12 May 2022	0021_SW043_220512	ES2216861	0.47	0.23	<0.01	0.70	0.70	0.70	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Receptor	0021_SW043	12 Oct 2022	0021_SW043_221012	ES2237106	0.17	0.06	<0.01	0.23	0.23	0.23	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Receptor	0021_SW043	18 Apr 2023	0021_SW043_230418	ES2313364	0.30	0.18	<0.01	0.48	0.48	0.48	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Receptor	0021_SW043	17 Oct 2023	0021_SW043_231017	ES2336399	0.09	0.08	<0.01	0.17	0.17	0.17	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Receptor	0021_SW043	09 Apr 2024	0021_SW043_240409	ES2412012	0.80	0.57	0.02	1.37	1.50	1.44	-	-	0.02	<0.02	-	0.03	-	0.03	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02
Receptor	0021_SW043	23 Oct 2024	0021_QC106_241023	ES2435078	0.12	0.06	<0.01	0.18	0.18	0.18	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Receptor	0021_SW043	23 Oct 2024	0021_QC206_241023	1154751	0.14	0.06	<0.01	0.2	0.2	0.2	0.14	0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01
Receptor	0021_SW043	23 Oct 2024	0021_SW043_241023	ES2435078	0.12	0.06	<0.01	0.18	0.18	0.18	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Receptor	0021_SW043	29 Jan 2025	0021_SW043_250129	ES2503552	0.33	0.45	0.02	0.78	0.84	0.80	-	-	<0.02	<0.02	<0.02	<0.02	<0.02	0.04	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Receptor	0021_SW043	01 Apr 2025	0021_SW043_250401	ES2510622	0.99	0.59	0.02	1.58	1.69	1.63	-	-	<0.02	<0.02	-	0.03	-	0.03	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02
Receptor	0021_SW051	28 Mar 2018	MC_QC109_180328	ES1809328	0.0005	<0.0005	<0.0005	0.0005	0.0005	0.0005	-	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	-	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Receptor	0021_SW051	28 Mar 2018	MC_SW09_180328	ES1809328	0.0005	<0.0005	<0.0005	0.0005	0.0005	0.0005	-	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	-	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Receptor	0021_SW051	12 May 2022	0021_SW051_220512	ES2216861	0.25	0.10	<0.01	0.35	0.35	0.35	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Receptor	0021_SW051	23 Oct 2024	0021_SW051_241023	ES2435078	<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
Receptor	0021_SW051	03 Apr 2025	0021_SW051_250403	ES2510622	<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
Receptor	0021_SW052	20 Mar 2018	MC_SW10_180320	ES1808818	0.0014	0.0005	<0.0005	0.0019	0.0019	0.0019	-	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	-	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Receptor	0021_SW052	28 Mar 2018	MC_SW10_180328	ES1809328	0.902	0.659	0.0232	1.56	1.73	1.64	-	-	0.0202	<0.0005	-	0.0344	-	0.0521	-	<0.002	<0.0005	<0.0005	0.0045	0.0320	<0.0005
Receptor	0021_SW052	12 May 2022	0021_SW052_220512	ES2216861	0.47	0.20	<0.01	0.67	0.67	0.67	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Receptor	0021_SW052	12 Oct 2022	0021_SW052_221012	ES2237106	0.02	<0.01	<0.01	0.02	0.02	0.02	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Receptor	0021_SW052	18 Apr 2023	0021_SW052_230418	ES2313364	0.30	0.11	<0.01	0.41	0.41	0.41	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Receptor	0021_SW052	17 Oct 2023	0021_SW052_231017	ES2336399	<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
Receptor	0021_SW052	09 Apr 2024	0021_SW052_240409	ES2412012	<0.01	0.35	0.01	0.35	0.39	0.36	-	-	<0.02	<0.02	-	0.03	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Receptor	0021_SW052	23 Oct 2024	0021_SW052_241023	ES2435078	0.06	0.05	<0.01	0.11	0.11	0.11	-	-	<0.02	<0.02	-	<0.02	-	<0.02	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Receptor	0021_SW052	29 Jan 2025	0021_SW052_250129	ES2503552	0.21	0.78	0.02	0.99	1.12	1.04	-	-	0.03	<0.02	<0.02	0.02	<0.02	0.06	-	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02
Receptor	0021_SW052	01 Apr 2025	0021_SW052_250401	ES2510622	1.04	0.57	0.02	1.61	1.74	1.68	-	-	0.02	<0.02	-	0.03	-	0.03	-	<0.1	<0.02	<0.02	<0.02	0.03	<0.02
Receptor	0021_SW211	23 Oct 2024	0021_SW211_241023	ES2435078	<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
Receptor	0021_SW211	03 Apr 2025	0021_SW211_250403	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	<0.02	<0.02	<0.02	<0.02
Statistics																									
Number of Results					551	551	551	551	551	533	54	36	551	551	41	551	59	551	18	551	551	551	551	551	551
Number of Detects					484	480	340	494	493	477	49	33	330	39	8	316	38	344	7	57	15	0	253	355	33
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	0.002	0.0005	<0.001	0.002	0.0005	<0.0005	<0.0005	0.0005	<0.0005
Minimum Detect					0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.02	0.127	0.0006	0.0015	0.02	0.0007	0.002	0.0005	0.004	0.002	0.0005	ND	0.0009	0.0005	0.0006
Maximum Concentration					322	103	7.24	425	466	452	165.3	227.3	13.9	0.55	0.58	9.5	0.61	19.5	0.35	1.61	0.81	<0.1	2.94	21.6	0.73
Maximum Detect					322	103	7.24	425	466	452	165.3	227.3	13.9	0.55	0.58	9.5	0.61	19.5	0.35	1.61	0.81	ND	2.94	21.6	0.73
Average Concentration *					7.8	3.4	0.19	11	13	12	10	15	0.2	0.014	0.035	0.26	0.059	0.3	0.03	0.067	0.011	0.0093	0.072	0.54	0.012
Geometric Average *					0.49	0.36	0.027	0.85	0.95	0.91	1.3	2.6	0.039	0.008	0.012	0.039	0.023	0.049	0.0073	0.039	0.0072	0.0071	0.019	0.07	0.0075
Median Concentration *					0.89	0.68	0.0232	1.64	1.86	1.79	1.735	4.065	0.04	0.01	0.01	0.03	0.02	0.05	0.005	0.05	0.01	0.01	0.01	0.08	0.01
Standard Deviation *					26	10	0.66	35	39	37	30	38	0.85	0.035	0.099	0.86	0.12	1.2	0.082	0.12	0.043	0.0045	0.24	1.8	0.038
Geometric Standard Deviation *					18	13	6.9	18	18	18	12	12	5.4	2.8	3	6.4	3.5	6.3	4.6	3.3	2.7	2.9	4.3	8.1	2.7
95% UCL (Student's-t) *					9.659	4.107	0.241	13.68	15.7	14.95	17.08	25.67	0.258	0.016	0.0614	0.323	0.0846	0.385	0.0638	0.076	0.0144	0.00961	0.0885	0.659	0.0145
Number of Env Standard Exceedances					369	175	0	258	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Env Standard Exceedances (Detects Only)					369	175	0	258	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Detects					88	87	62	90	89	89	91	92	60	7	20	57	64	62	39	10	3	0	46	64	6
% of Non-Detects					12	13	38	10	11	11	9	8	40	93	80	43	36	38	61	90	97	100	54	36	94
% of Detects at or above Env Standards					67	32	0	47	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					33	68	100	53	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.
#2 Reported Analyte LOR is higher than Requested Analyte LOR

Environmental Standards

HEPA, March 2025, PFAS NEMP 2025 Freshwater and Interim Marine 95%
HEPA, March 2025, PFAS NEMP 2025 Recreational water quality

					xylic Acids					PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	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 (FOSA)	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					0.0005	0.0005	0.0005	0.0005	0.05	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 2025 Freshwater and Interim Marine 95%																				
PFAS NEMP 2025 Recreational water quality																				
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																
Source	0021_MW024	04 May 2017	MW024	ES1711220	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Source	0021_MW024	20 Oct 2021	0021_MW024_211020	ES2138639	<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
Source	0021_MW024	06 Apr 2022	0021_MW024_220406	ES2212442	<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
Source	0021_MW024	12 Oct 2022	0021_MW024_221012	ES2237106	<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
Source	0021_MW024	17 Apr 2023	0021_MW024_230417	ES2313364	<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
Source	0021_MW024	16 Oct 2023	0021_MW024_231016	ES2336398	<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
Source	0021_MW024	08 Apr 2024	0021_MW024_240408	ES2411994	<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
Source	0021_MW024	24 Oct 2024	0021_MW024_241024	ES2435541	<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
Source	0021_MW024	24 Oct 2024	0021_QC257_241024	1156146	<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
Source	0021_MW024	01 Apr 2025	0021_MW024_250401	ES2510113	<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
Source	0021_MW061	21 Jun 2021	0021_MW061_210621	ES2123994	0.10	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW061	23 Jun 2021	0021_QC211_210623	807414	0.11	<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
Source	0021_MW061	11 Apr 2024	0021_MW061_240411	ES2411994	0.05	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW061	24 Oct 2024	0021_MW061_241024	ES2435541	0.05	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW061	24 Apr 2025	0021_MW061_250424	ES2512435	<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
Source	0021_MW063	22 Jun 2021	0021_MW063_210622	ES2123994	<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
Source	0021_MW063	22 Nov 2021	0021_MW063_211122	ES2142514	<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
Source	0021_MW063	22 Nov 2021	0021_QC201_211122	845848	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
Source	0021_MW063	25 Oct 2024	0021_MW063_241025	ES2435541	<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
Source	0021_MW063	25 Oct 2024	0021_QC159_241025	ES2435541	<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
Source	0021_MW063	25 Oct 2024	0021_QC259_241025	1156160	0.02	<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
Source	0021_MW063	29 Jan 2025	0021_MW063_250129	ES2503552	0.02	<0.05	<0.02	<0.02	<0.05	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW063	03 Apr 2025	0021_MW063_250403	ES2510113	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
Source	0021_MW064	22 Jun 2021	0021_MW064_210622	ES2123994	0.43	<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
Source	0021_MW064	23 Jun 2021	0021_QC212_210623	807414	0.43	<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
Source	0021_MW064	22 Nov 2021	0021_MW064_211122	ES2142514	0.05	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW064	22 Nov 2021	0021_QC101_211122	ES2142514	0.05	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW064	25 Oct 2024	0021_MW064_241025	ES2435541	0.05	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW064	03 Apr 2025	0021_MW064_250403	ES2510113	0.03	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW065	22 Jun 2021	0021_MW065_210622	ES2123994	0.22	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW065	22 Nov 2021	0021_MW065_211122	ES2142514	0.06	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW065	24 Oct 2024	0021_MW065_241024	ES2435541	<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
Source	0021_MW065	29 Jan 2025	0021_MW065_250129	ES2503552	0.13	<0.05	<0.02	<0.02	<0.05	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW065	03 Apr 2025	0021_MW065_250403	ES2510113	0.06	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW101	28 Apr 2017	A_MW01	ES1710200	0.0044	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Source	0021_MW101	09 Sep 2020	0021_MW101_200909	ES2031960	0.0029	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Source	0021_MW101	19 Oct 2021	0021_MW101_211019	ES2138639	<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
Source	0021_MW101	05 Apr 2022	0021_MW101_220405	ES2212442	<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
Source	0021_MW101	13 Oct 2022	0021_MW101_221013	ES2237106	<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
Source	0021_MW101	20 Apr 2023	0021_MW101_230420	ES2313364	<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
Source	0021_MW101	19 Oct 2023	0021_MW101_231019	ES2336398	<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
Source	0021_MW101	10 Apr 2024	0021_MW101_240410	ES2411994	<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
Source	0021_MW101	24 Oct 2024	0021_MW101_241024	ES2435541	<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
Source	0021_MW101	04 Apr 2025	0021_MW101_250404	ES2510113	<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
Source	0021_MW103	28 Apr 2017	A_MW03	ES1710200	0.972	<0.0500	<0.0200	<0.0200	-	<0.050	<0.0200	<0.050	<0.050	<0.0200	<0.050	<0.0200	<0.020	<0.020	<0.020	<0.020
Source	0021_MW103	02 May 2018	A_MW03_180502	ES1812871	0.84	<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
Source	0021_MW103	24 Jun 2020	JBRF-A-MW03-2-200624	727660	0.18	<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
Source	0021_MW103	22 Jun 2021	0021_MW103_210622	ES2123994	0.08	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW103	22 Jun 2021	0021_QC114_210622	ES2123994	0.10	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW103	19 Oct 2021	0021_MW103_211019	ES2138639	0.15	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW103	22 Nov 2021	0021_MW103_211122	ES2142514	0.16	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW103	06 Apr 2022	0021_MW103_220406	ES2212442	0.13	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW103	13 Oct 2022	0021_MW103_221013	ES2237106	0.10	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW103	20 Apr 2023	0021_MW103_230420	ES2313364	0.18	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW103	18 Oct 2023	0021_MW103_231018	ES2336398	0.10	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW103	11 Apr 2024	0021_MW103_240411	ES2411994	0.11	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW103	25 Oct 2024	0021_MW103_241025	ES2435541	0.09	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW103	03 Apr 2025	0021_MW103_250403	ES2510113	0.12	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW104	28 Apr 2017	A_MW04	ES1710200	0.0920	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Source	0021_MW104	22 Jun 2021	0021_MW104_210622	ES2123994	<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
Source	0021_MW104	19 Oct 2021	0021_MW104_211019	ES2138639	<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
Source	0021_MW104	22 Nov 2021	0021_MW104_211122	ES2142514	<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
Source	0021_MW104	06 Apr 2022	0021_MW104_220406	ES2212442	<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
Source	0021_MW104	13 Oct 2022	0021_MW104_221013	ES2237106	<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
Source	0021_MW104	20 Apr 2023	0021_MW104_230420	ES2313364	<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
Source	0021_MW104	18 Oct 2023	0021_MW104_231018	ES2336398	<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

					xylic Acids					PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	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 (FOSA)	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					0.0005	0.0005	0.0005	0.0005	0.05	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 2025 Freshwater and Interim Marine 95%																				
PFAS NEMP 2025 Recreational water quality																				
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																
Source	0021_MW104	11 Apr 2024	0021_MW104_240411	ES2411994	<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
Source	0021_MW104	24 Oct 2024	0021_MW104_241024	ES2435541	<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
Source	0021_MW104	25 Oct 2024	0021_QC156_241025	ES2435541	<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
Source	0021_MW104	29 Jan 2025	0021_MW104_250129	ES2503552	<0.02	<0.05	<0.02	<0.02	<0.05	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW104	03 Apr 2025	0021_MW104_250403	ES2510113	<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
Source	0021_MW105	28 Apr 2017	A_MW05	ES1710200	<0.0200	<0.0500	<0.0200	<0.0200	-	<0.050	<0.0200	<0.050	<0.050	<0.0200	<0.050	<0.0200	<0.020	<0.020	<0.020	<0.020
Source	0021_MW105	19 Oct 2021	0021_MW105_211019	ES2138639	0.17	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW105	19 Oct 2021	0021_QC200_211019	281322	0.2	<0.5	<0.1	<0.02	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Source	0021_MW105	06 Apr 2022	0021_MW105_220406	ES2212442	0.22	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW105	13 Oct 2022	0021_MW105_221013	ES2237106	0.12	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW105	20 Apr 2023	0021_MW105_230420	ES2313364	0.19	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW105	19 Oct 2023	0021_MW105_231019	ES2336398	0.06	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW105	11 Apr 2024	0021_MW105_240411	ES2411994	0.07	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW105	22 Oct 2024	0021_MW105_241022	ES2435078	0.10	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW105	29 Jan 2025	0021_MW105_250129	ES2503552	0.04	<0.05	<0.02	<0.02	<0.05	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW105	03 Apr 2025	0021_MW105_250403	ES2510113	0.03	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW105	03 Apr 2025	0021_QC256_250403	1210052	0.04	<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
Source	0021_MW106	27 Apr 2017	A_MW06	ES1710200	0.292	<0.0500	<0.0200	<0.0200	-	<0.050	<0.0200	<0.050	<0.050	<0.0200	<0.050	<0.0200	<0.020	<0.020	<0.020	<0.020
Source	0021_MW106	24 Jun 2020	JBRF-A-MW06-2-200624	727660	1.6	<0.01	<0.01	<0.01	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	0.06	<0.01	<0.01
Source	0021_MW106	09 Sep 2020	0021_MW106_200909	ES2031960	1.10	<0.0040[#2]	<0.0016[#2]	<0.0016[#2]	-	<0.004[#2]	<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]
Source	0021_MW106	09 Sep 2020	0021_QC123_200909	ES2031960	1.37	<0.0040[#2]	<0.0016[#2]	<0.0016[#2]	-	<0.004[#2]	<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]
Source	0021_MW106	19 Oct 2021	0021_MW106_211019	ES2138639	0.64	<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
Source	0021_MW106	05 Apr 2022	0021_MW106_220405	ES2212442	0.46	<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
Source	0021_MW106	05 Apr 2022	0021_QC104_220405	ES2212442	0.72	<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
Source	0021_MW106	13 Oct 2022	0021_MW106_221013	ES2237106	0.77	<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
Source	0021_MW106	13 Oct 2022	0021_QC210_221013	308187	0.74	<0.5	<0.1	<0.02	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	0.03	<0.02	<0.02
Source	0021_MW106	20 Apr 2023	0021_MW106_230420	ES2313364	1.92	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	0.08	<0.05	<0.05
Source	0021_MW106	19 Oct 2023	0021_MW106_231019	ES2336398	1.36	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	0.06	<0.05	<0.05
Source	0021_MW106	10 Apr 2024	0021_MW106_240410	ES2411994	0.45	<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
Source	0021_MW106	24 Oct 2024	0021_MW106_241024	ES2435541	1.17	<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
Source	0021_MW106	29 Jan 2025	0021_MW106_250129	ES2503552	0.70	<0.05	<0.02	<0.02	<0.05	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW106	04 Apr 2025	0021_MW106_250404	ES2510113	0.47	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW107	08 May 2017	A_MW07	ES1711220	0.305	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.0008	<0.001	<0.001	<0.001	<0.001
Source	0021_MW107	22 Jun 2021	0021_MW107_210622	ES2123994	0.09	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW107	19 Oct 2021	0021_MW107_211019	ES2138639	0.12	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW107	19 Oct 2021	0021_QC100_211019	ES2138639	0.12	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW107	22 Nov 2021	0021_MW107_211122	ES2142514	0.11	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW107	06 Apr 2022	0021_MW107_220406	ES2212442	0.08	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW107	13 Oct 2022	0021_MW107_221013	ES2237106	0.08	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW107	20 Apr 2023	0021_MW107_230420	ES2313364	0.10	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW107	20 Apr 2023	0021_QC110_230420	ES2313364	0.08	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW107	20 Apr 2023	0021_QC210_230420	321517	0.09	<0.5	<0.1	<0.02	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Source	0021_MW107	18 Oct 2023	0021_MW107_231018	ES2336398	0.11	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW107	11 Apr 2024	0021_MW107_240411	ES2411994	0.08	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW107	11 Apr 2024	0021_QC112_240411	ES2411994	0.10	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW107	11 Apr 2024	0021_QC212_240411	348825	0.08	<0.5	<0.1	<0.02	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Source	0021_MW107	24 Oct 2024	0021_MW107_241024	ES2435541	0.16	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW107	03 Apr 2025	0021_MW107_250403	ES2510113	0.11	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW107	03 Apr 2025	0021_QC156_250403	ES2510113	0.12	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW110	28 Apr 2017	B_MW01	ES1710200	0.0021	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Source	0021_MW110	22 Jun 2021	0021_MW110_210622	ES2123994	<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
Source	0021_MW110	20 Oct 2021	0021_MW110_211020	ES2138639	<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
Source	0021_MW110	22 Nov 2021	0021_MW110_211122	ES2142514	<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
Source	0021_MW110	07 Apr 2022	0021_MW110_220407	ES2212442	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
Source	0021_MW110	13 Oct 2022	0021_MW110_221013	ES2237106	<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
Source	0021_MW110	20 Apr 2023	0021_MW110_230420	ES2313364	<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
Source	0021_MW110	18 Oct 2023	0021_MW110_231018	ES2336398	<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
Source	0021_MW110	10 Apr 2024	0021_MW110_240410	ES2411994	<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
Source	0021_MW110	25 Oct 2024	0021_MW110_241025	ES2435541	<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
Source	0021_MW110	29 Jan 2025	0021_MW110_250130	ES2503552	<0.02	<0.05	<0.02	<0.02	<0.05	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW110	30 Jan 2025	0021_QC103_250130	ES2503552	<0.02	<0.05	<0.02	<0.02	<0.05	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW110	30 Jan 2025	0021_QC203_250130	1187025	<0.1	<0.1	<0.1	<0.1	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.1	<0.5	<0.1	<0.1
Source	0021_MW110	01 Apr 2025	0021_MW110_250401	ES2510113	<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
Source	0021_MW111	28 Apr 2017	B_MW02	ES1710200	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Source	0021_MW111	22 Jun 2021	0021_MW111_210622	ES2123994	<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
Source	0021_MW111	20 Oct 2021	0021_MW111_211020	ES2138639	<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

					xylic Acids					PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	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 (FOSA)	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					0.0005	0.0005	0.0005	0.0005	0.05	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 2025 Freshwater and Interim Marine 95%																				
PFAS NEMP 2025 Recreational water quality																				
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																
Source	0021_MW111	22 Nov 2021	0021_MW111_211122	ES2142514	<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
Source	0021_MW111	07 Apr 2022	0021_MW111_220407	ES2212442	<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
Source	0021_MW111	13 Oct 2022	0021_MW111_221013	ES2237106	<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
Source	0021_MW111	20 Apr 2023	0021_MW111_230420	ES2313364	<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
Source	0021_MW111	18 Oct 2023	0021_MW111_231018	ES2336398	<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
Source	0021_MW111	10 Apr 2024	0021_MW111_240410	ES2411994	<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
Source	0021_MW111	25 Oct 2024	0021_MW111_241025	ES2435541	<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
Source	0021_MW111	30 Jan 2025	0021_MW111_250130	ES2503552	<0.02	<0.05	<0.02	<0.02	<0.05	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW111	08 Apr 2025	0021_MW111_250408	ES2510113	<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
Source	0021_MW150	13 Aug 2020	0021_MW150_200813	ES2028499	0.0589	<0.0040[#2]	<0.0016[#2]	<0.0016[#2]	-	<0.004[#2]	<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]
Source	0021_MW150	25 Oct 2024	0021_MW150_241025	ES2435541	0.05	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW150	25 Oct 2024	0021_QC158_241025	ES2435541	0.04	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW150	25 Oct 2024	0021_QC258_241025	1156160	0.05	<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
Source	0021_MW150	29 Jan 2025	0021_MW150_250129	ES2503552	0.06	<0.05	<0.02	<0.02	<0.05	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW150	04 Apr 2025	0021_MW150_250404	ES2510113	0.07	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW151	13 Aug 2020	0021_MW151_200813	ES2028499	0.294	<0.0040[#2]	<0.0016[#2]	<0.0016[#2]	-	<0.004[#2]	<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]
Source	0021_MW151	25 Oct 2024	0021_MW151_241025	ES2435541	0.16	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW151	04 Apr 2025	0021_MW151_250404	ES2510113	0.15	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW152	13 Aug 2020	0021_MW152_200813	ES2028499	0.231	<0.0040[#2]	<0.0016[#2]	<0.0016[#2]	-	<0.004[#2]	<0.0016[#2]	<0.004[#2]	<0.004[#2]	<0.0016[#2]	<0.004[#2]	<0.0016[#2]	<0.002[#2]	0.004	<0.002[#2]	<0.002[#2]
Source	0021_MW152	25 Oct 2024	0021_MW152_241025	ES2435541	0.18	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW152	08 Apr 2025	0021_MW152_250408	ES2510113	0.16	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW153	12 Aug 2020	0021_MW153_200812	ES2028499	0.258	<0.0040[#2]	<0.0016[#2]	<0.0016[#2]	-	<0.004[#2]	<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]
Source	0021_MW153	12 Aug 2020	0021_QC115_200812	ES2028499	0.252	<0.0040[#2]	<0.0016[#2]	<0.0016[#2]	-	<0.004[#2]	<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]
Source	0021_MW153	12 Aug 2020	0021_QC215_200812	737847	0.29	<0.001	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	0.001	<0.001
Source	0021_MW153	25 Oct 2024	0021_MW153_241025	ES2435541	0.16	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW153	29 Jan 2025	0021_MW153_250129	ES2503552	0.16	<0.05	<0.02	<0.02	<0.05	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW153	04 Apr 2025	0021_MW153_250404	ES2510113	0.17	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW153	04 Apr 2025	0021_QC140_250404	ES2510113	0.18	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW153	04 Apr 2025	0021_QC240_250404	1210052	0.17	<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
Source	0021_MW154	13 Aug 2020	0021_MW154_200813	ES2028499	1.88	<0.0040[#2]	<0.0016[#2]	<0.0016[#2]	-	<0.004[#2]	<0.0016[#2]	<0.004[#2]	<0.004[#2]	<0.0016[#2]	<0.004[#2]	<0.0016[#2]	<0.002[#2]	0.009	<0.002[#2]	<0.002[#2]
Source	0021_MW154	25 Oct 2024	0021_MW154_241025	ES2435541	1.51	<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
Source	0021_MW154	04 Apr 2025	0021_MW154_250404	ES2510113	1.30	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_MW155	13 Aug 2020	0021_MW155_200813	ES2028499	3.15	<0.0040[#2]	<0.0016[#2]	0.0016	-	<0.004[#2]	<0.0016[#2]	<0.004[#2]	<0.004[#2]	<0.0016[#2]	<0.004[#2]	0.0018	<0.002[#2]	0.050	0.023	0.006
Source	0021_MW155	25 Oct 2024	0021_MW155_241025	ES2435541	2.00	<0.05	<0.02	0.07	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	0.08	<0.05	<0.05
Source	0021_MW155	04 Apr 2025	0021_MW155_250404	ES2510113	1.78	<0.05	<0.02	0.05	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW002	20 Apr 2017	AB_SW02	ES1709644	0.0569	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.0019	<0.001	<0.001	<0.001	<0.001
Source	0021_SW002	19 Oct 2021	0021_SW002_211019	ES2138639	0.13	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW002	05 Apr 2022	0021_SW002_220405	ES2212442	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
Source	0021_SW002	13 Oct 2022	0021_SW002_221013	ES2237106	0.07	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW002	20 Apr 2023	0021_SW002_230420	ES2313364	0.07	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW002	18 Oct 2023	0021_SW002_231018	ES2336399	0.06	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW002	11 Apr 2024	0021_SW002_240411	ES2412012	<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
Source	0021_SW003	20 Apr 2017	AB_SW03	ES1709644	0.0013	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Source	0021_SW003	19 Oct 2021	0021_SW003_211019	ES2138639	<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
Source	0021_SW003	05 Apr 2022	0021_SW003_220405	ES2212442	<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
Source	0021_SW003	13 Oct 2022	0021_QC205_221013	308187	<0.02	<0.5	<0.1	<0.02	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Source	0021_SW003	13 Oct 2022	0021_SW003_221013	ES2237106	<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
Source	0021_SW003	20 Apr 2023	0021_SW003_230420	ES2313364	<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
Source	0021_SW003	11 Apr 2024	0021_SW003_240411	ES2412012	<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
Source	0021_SW003	03 Apr 2025	0021_SW003_250403	ES2510622	<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
Source	0021_SW004	13 Apr 2017	AB_SW04	ES1709064	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Source	0021_SW004	13 Apr 2017	TNQA08	ES1709064	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Source	0021_SW004	26 Oct 2021	0021_SW004_211026	ES2138639	<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
Source	0021_SW004	06 Apr 2022	0021_SW004_220406	ES2212442	<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
Source	0021_SW004	14 Oct 2022	0021_SW004_221014	ES2237106	<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
Source	0021_SW004	21 Apr 2023	0021_SW004_230421	ES2313364	<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
Source	0021_SW004	12 Apr 2024	0021_SW004_240412	ES2412012	<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
Source	0021_SW004	02 Apr 2025	0021_SW004_250402	ES2510622	<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
Source	0021_SW005	13 Apr 2017	AB_SW05	ES1709064	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Source	0021_SW005	20 Oct 2021	0021_SW005_211020	ES2138639	<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
Source	0021_SW005	06 Apr 2022	0021_SW005_220406	ES2212442	<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
Source	0021_SW005	14 Oct 2022	0021_SW005_221014	ES2237106	<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
Source	0021_SW005	21 Apr 2023	0021_SW005_230421	ES2313364	<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
Source	0021_SW005	12 Apr 2024	0021_SW005_240412	ES2412012	<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
Source	0021_SW005	02 Apr 2025	0021_SW005_250402	ES2510622	<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
Source	0021_SW006	13 Apr 2017	AB_SW06	ES1709064	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001

					xylic Acids					PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	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 (FOSA)	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					0.0005	0.0005	0.0005	0.0005	0.05	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 2025 Freshwater and Interim Marine 95%																				
PFAS NEMP 2025 Recreational water quality																				
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																
Source	0021_SW006	20 Oct 2021	0021_SW006_211020	ES2138639	<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
Source	0021_SW006	06 Apr 2022	0021_SW006_220406	ES2212442	<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
Source	0021_SW006	14 Oct 2022	0021_SW006_221014	ES2237106	<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
Source	0021_SW006	21 Apr 2023	0021_SW006_230421	ES2313364	<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
Source	0021_SW006	12 Apr 2024	0021_SW006_240412	ES2412012	<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
Source	0021_SW006	02 Apr 2025	0021_SW006_250402	ES2510622	<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
Source	0021_SW011	11 Apr 2017	B_SW02	ES1708884	0.0029	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Source	0021_SW011	20 Oct 2021	0021_SW011_211020	ES2138639	<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
Source	0021_SW011	07 Apr 2022	0021_SW011_220407	ES2212442	<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
Source	0021_SW011	12 Oct 2022	0021_SW011_221012	ES2237106	<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
Source	0021_SW011	20 Apr 2023	0021_SW011_230420	ES2313364	<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
Source	0021_SW011	10 Apr 2024	0021_SW011_240410	ES2412012	<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
Source	0021_SW012	22 Nov 2021	0021_SW012_211122	ES2142514	0.13	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW012	02 Feb 2023	0021_QC161_230202	ES2303445	0.12	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW012	02 Feb 2023	0021_SW012_230202	ES2303445	0.11	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW012	09 Mar 2023	0021_SW012_230309	ES2308203	0.11	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW012	01 May 2023	0021_SW012_230501	ES2314437	0.03	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW012	06 Jun 2023	0021_SW012_230606	ES2319084	0.05	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW012	08 Aug 2023	0021_QC100_230808	ES2326813	0.05	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW012	08 Aug 2023	0021_SW012_230808	ES2326813	0.04	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW012	12 Dec 2023	0021_QC200_231212	1054721	0.11	<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
Source	0021_SW012	12 Dec 2023	0021_SW012_231212	ES2343587	0.10	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW012	31 Mar 2025	0021_SW012_250331	ES2510622	<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
Source	0021_SW016	13 Apr 2017	DC_SW01	ES1709064	0.0038	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Source	0021_SW016	20 Oct 2021	0021_SW016_211020	ES2138639	<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
Source	0021_SW016	06 Apr 2022	0021_SW016_220406	ES2212442	<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
Source	0021_SW016	14 Oct 2022	0021_SW016_221014	ES2237106	<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
Source	0021_SW017	13 Apr 2017	DC_SW02	ES1709064	0.0051	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.0008	<0.001	<0.001	<0.001	<0.001
Source	0021_SW017	06 Apr 2022	0021_QC206_220406	293031	<0.02	<0.5	<0.1	<0.02	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Source	0021_SW017	06 Apr 2022	0021_SW017_220406	ES2212442	<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
Source	0021_SW017	14 Oct 2022	0021_SW017_221014	ES2237106	0.06	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW110	04 Aug 2020	0021_QC101_200804	ES2027217	0.0040	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Source	0021_SW110	04 Aug 2020	0021_QC201_200804	736971	0.003	<0.001	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.001	<0.001
Source	0021_SW110	04 Aug 2020	0021_SW110_200804	ES2027217	0.0054	<0.0040[#2]	<0.0016[#2]	<0.0016[#2]	-	<0.004[#2]	<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]
Source	0021_SW110	10 Aug 2020	0021_QC109_200810	ES2028286	0.0235	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.0010	<0.001	<0.001	<0.001	<0.001
Source	0021_SW110	10 Aug 2020	0021_QC209_200810	737847	0.021	<0.001	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.001	<0.001
Source	0021_SW110	10 Aug 2020	0021_SW110_200810	ES2028286	0.0253	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.0008	<0.001	<0.001	<0.001	<0.001
Source	0021_SW110	19 Oct 2021	0021_SW110_211019	ES2138639	<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
Source	0021_SW110	22 Nov 2021	0021_QC100_211122	ES2142514	<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
Source	0021_SW110	22 Nov 2021	0021_SW110_211122	ES2142514	<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
Source	0021_SW110	05 Apr 2022	0021_SW110_220405	ES2212442	<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
Source	0021_SW110	13 Oct 2022	0021_SW110_221013	ES2237106	<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
Source	0021_SW110	20 Apr 2023	0021_QC111_230420	ES2313364	<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
Source	0021_SW110	20 Apr 2023	0021_QC211_230420	321517	<0.02	<0.5	<0.1	<0.02	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Source	0021_SW110	20 Apr 2023	0021_SW110_230420	ES2313364	<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
Source	0021_SW110	19 Oct 2023	0021_SW110_231019	ES2336399	0.06	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW110	10 Apr 2024	0021_QC110_240410	ES2412012	<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
Source	0021_SW110	10 Apr 2024	0021_QC210_240410	348825	<0.02	<0.5	<0.1	<0.02	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Source	0021_SW110	10 Apr 2024	0021_SW110_240410	ES2412012	<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
Source	0021_SW110	24 Oct 2024	0021_QC108_241024	ES2435541	0.04	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW110	24 Oct 2024	0021_QC208_241024	1156146	0.05	<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
Source	0021_SW110	24 Oct 2024	0021_SW110_241024	ES2435541	0.06	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW110	03 Apr 2025	0021_SW110_250403	ES2510623	<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
Source	0021_SW112	04 Aug 2020	0021_SW112_200804	ES2027217	0.0035	<0.0040[#2]	<0.0016[#2]	<0.0016[#2]	-	<0.004[#2]	<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]
Source	0021_SW112	19 Oct 2021	0021_SW112_211019	ES2138639	<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
Source	0021_SW112	05 Apr 2022	0021_SW112_220405	ES2212442	<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
Source	0021_SW112	13 Oct 2022	0021_SW112_221013	ES2237106	<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
Source	0021_SW112	20 Apr 2023	0021_SW112_230420	ES2313364	<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
Source	0021_SW112	18 Oct 2023	0021_SW112_231018	ES2336399	<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
Source	0021_SW112	10 Apr 2024	0021_SW112_240410	ES2412012	<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
Source	0021_SW112	24 Oct 2024	0021_SW112_241024	ES2435541	0.05	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW112	03 Apr 2025	0021_SW112_250403	ES2510623	<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
Source	0021_SW127	20 Aug 2020	0021_QC122_200820	EW2003840	0.146	<0.0005	<0.0005	0.0010	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.0164	<0.001	0.009	<0.001	<0.001
Source	0021_SW127	20 Aug 2020	0021_SW127_200820	EW2003840	0.123	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.0051	<0.001	0.008	<0.001	<0.001
Source	0021_SW127	20 Oct 2021	0021_QC105_211020	ES2138639	<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
Source	0021_SW127	20 Oct 2021	0021_SW127_211020	ES2138639	<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

					xylic Acids					PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	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 (FOSA)	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					0.0005	0.0005	0.0005	0.0005	0.05	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 2025 Freshwater and Interim Marine 95%																				
PFAS NEMP 2025 Recreational water quality																				
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																
Source	0021_SW127	22 Nov 2021	0021_SW127_211122	ES2142514	0.08	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW127	07 Apr 2022	0021_SW127_220407	ES2212442	<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
Source	0021_SW127	12 Oct 2022	0021_SW127_221012	ES2237106	0.05	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW127	02 Feb 2023	0021_QC261_230202	961609	0.11[#1]	<0.01	<0.01	<0.01	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Source	0021_SW127	02 Feb 2023	0021_SW127_230202	ES2303445	0.10	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW127	09 Mar 2023	0021_SW127_230309	ES2308203	0.08	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW127	20 Apr 2023	0021_SW127_230420	ES2313364	0.09	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW127	01 May 2023	0021_QC100_230501	ES2314437	<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
Source	0021_SW127	01 May 2023	0021_QC200_230501	987074	<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
Source	0021_SW127	01 May 2023	0021_SW127_230501	ES2314437	<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
Source	0021_SW127	06 Jun 2023	0021_SW127_230606	ES2319084	0.04	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW127	18 Oct 2023	0021_SW127_231018	ES2336399	0.08	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW127	10 Apr 2024	0021_SW127_240410	ES2412012	0.04	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW127	01 Apr 2025	0021_SW127_250401	ES2510623	<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
Source	0021_SW130	24 Jun 2020	JBRF-A-SW03-200624	727660	0.04	<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
Source	0021_SW130	09 Sep 2020	0021_QC222_200909	743330	0.009	<0.001	<0.001	<0.001	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.001	<0.001
Source	0021_SW130	09 Sep 2020	0021_SW130_200909	ES2031960	0.0114	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.0011	<0.001	<0.001	<0.001	<0.001
Source	0021_SW130	19 Oct 2021	0021_SW130_211019	ES2138639	0.10	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW130	22 Nov 2021	0021_QC200_211122	845848	0.04	<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
Source	0021_SW130	22 Nov 2021	0021_SW130_211122	ES2142514	0.04	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW130	05 Apr 2022	0021_SW130_220405	ES2212442	0.04	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW130	13 Oct 2022	0021_QC206_221013	308187	0.03	<0.5	<0.1	<0.02	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Source	0021_SW130	13 Oct 2022	0021_SW130_221013	ES2237106	0.03	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW130	20 Apr 2023	0021_QC106_230420	ES2313364	0.05	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW130	20 Apr 2023	0021_QC206_230420	321517	0.06	<0.5	<0.1	<0.02	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Source	0021_SW130	20 Apr 2023	0021_SW130_230420	ES2313364	0.05	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW130	18 Oct 2023	0021_QC109_231018	ES2336399	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
Source	0021_SW130	18 Oct 2023	0021_QC209_231018	335876	0.03	<0.5	<0.1	<0.02	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Source	0021_SW130	18 Oct 2023	0021_SW130_231018	ES2336399	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
Source	0021_SW130	11 Apr 2024	0021_SW130_240411	ES2412012	<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
Source	0021_SW130	25 Oct 2024	0021_SW130_241025	ES2435541	0.23	<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
Source	0021_SW130	29 Jan 2025	0021_SW130_250129	ES2503552	<0.02	<0.05	<0.02	<0.02	<0.05	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW130	03 Apr 2025	0021_SW130_250403	ES2510623	0.06	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	31 Aug 2021	0021_SW153_210831	ES2131665	0.11	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	11 Nov 2021	0021_QC121_211111	EW2104861	0.17	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	11 Nov 2021	0021_SW153_211111221	EW2104861	0.18	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	11 Nov 2021	0021_SW153_211111231	EW2104861	0.07	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	12 Nov 2021	0021_QC122_211112	EW2104861	0.06	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	12 Nov 2021	0021_QC221_211112	844059	0.03	<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
Source	0021_SW153	12 Nov 2021	0021_QC222_211112	844059	0.05	<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
Source	0021_SW153	12 Nov 2021	0021_SW153_211112001	EW2104861	0.09	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	12 Nov 2021	0021_SW153_211112011	EW2104861	0.09	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	12 Nov 2021	0021_SW153_211112021	EW2104861	0.09	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	12 Nov 2021	0021_SW153_211112031	EW2104861	0.08	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	12 Nov 2021	0021_SW153_211112041	EW2104861	0.07	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	12 Nov 2021	0021_SW153_211112052	EW2104861	0.07	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	12 Nov 2021	0021_SW153_211112062	EW2104861	0.07	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	12 Nov 2021	0021_SW153_211112072	EW2104861	0.06	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	12 Nov 2021	0021_SW153_211112082	EW2104861	0.05	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	12 Nov 2021	0021_SW153_211112092	EW2104861	0.06	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	12 Nov 2021	0021_SW153_211112102	EW2104861	0.06	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	12 Nov 2021	0021_SW153_211112112	EW2104861	0.06	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	12 Nov 2021	0021_SW153_211112122	EW2104861	0.05	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	12 Nov 2021	0021_SW153_211112132	EW2104861	0.07	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	12 Nov 2021	0021_SW153_211112143	EW2104861	0.06	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	12 Nov 2021	0021_SW153_211112153	EW2104861	0.07	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	12 Nov 2021	0021_SW153_211112163	EW2104861	0.07	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	12 Nov 2021	0021_SW153_211112173	EW2104861	0.05	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	12 Nov 2021	0021_SW153_211112183	EW2104861	0.07	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	12 Nov 2021	0021_SW153_211112193	EW2104861	0.08	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	12 Nov 2021	0021_SW153_211112203	EW2104861	0.07	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	10 Dec 2021	0021_QC123_211210	ES2146373	0.15	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	10 Dec 2021	0021_QC223_211210	852877	0.06	<0.01	<0.01	<0.01	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Source	0021_SW153	10 Dec 2021	0021_SW153_211210043	ES2146373	0.16	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	10 Dec 2021	0021_SW153_211210083	ES2146373	0.09	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	10 Dec 2021	0021_SW153_211210123	ES2146373	0.08	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05

					xylic Acids					PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	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 (FOSA)	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					0.0005	0.0005	0.0005	0.0005	0.05	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 2025 Freshwater and Interim Marine 95%																				
PFAS NEMP 2025 Recreational water quality																				
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																
Source	0021_SW153	10 Dec 2021	0021_SW153_211210163	ES2146373	0.03	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	10 Dec 2021	0021_SW153_211210203	ES2146373	0.03	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	11 Dec 2021	0021_QC124_211211	ES2146373	0.06	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	11 Dec 2021	0021_QC224_211211	852877	0.05	<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
Source	0021_SW153	11 Dec 2021	0021_SW153_211211003	ES2146373	0.04	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	11 Dec 2021	0021_SW153_211211043	ES2146373	0.05	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	11 Dec 2021	0021_SW153_211211084	ES2146373	0.05	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	11 Dec 2021	0021_SW153_211211164	ES2146373	0.07	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	11 Dec 2021	0021_SW153_211211204	ES2146373	0.08	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	12 Dec 2021	0021_SW153_211212044	ES2146373	0.09	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	12 Dec 2021	0021_SW153_211212084	ES2146373	0.09	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	13 Dec 2021	0021_SW153_211213005	ES2146373	0.10	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	13 Dec 2021	0021_SW153_211213125	ES2146373	0.13	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	22 Feb 2022	0021_QC102_202022	ES2206899	<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
Source	0021_SW153	22 Feb 2022	0021_QC103_202022	ES2206899	<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
Source	0021_SW153	22 Feb 2022	0021_QC202_220222	868765	<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
Source	0021_SW153	22 Feb 2022	0021_QC203_220222	868765	<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
Source	0021_SW153	22 Feb 2022	0021_SW153_220222005	ES2206899	<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
Source	0021_SW153	22 Feb 2022	0021_SW153_220222015	ES2206899	<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
Source	0021_SW153	22 Feb 2022	0021_SW153_220222025	ES2206899	<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
Source	0021_SW153	22 Feb 2022	0021_SW153_220222035	ES2206899	<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
Source	0021_SW153	22 Feb 2022	0021_SW153_220222045	ES2206899	<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
Source	0021_SW153	22 Feb 2022	0021_SW153_220222080	ES2206899	<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
Source	0021_SW153	22 Feb 2022	0021_SW153_220222100	ES2206899	<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
Source	0021_SW153	22 Feb 2022	0021_SW153_220222110	ES2206899	0.03	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	22 Feb 2022	0021_SW153_220222141	ES2206899	<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
Source	0021_SW153	22 Feb 2022	0021_SW153_220222171	ES2206899	<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
Source	0021_SW153	22 Feb 2022	0021_SW153_220222201	ES2206899	<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
Source	0021_SW153	23 Feb 2022	0021_SW153_220223002	ES2206899	<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
Source	0021_SW153	08 Apr 2022	0021_SW153_220408	ES2212827	<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
Source	0021_SW153	12 May 2022	0021_SW153_220512095	ES2216861	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
Source	0021_SW153	12 May 2022	0021_SW153_220512105	ES2216861	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
Source	0021_SW153	12 May 2022	0021_SW153_220512115	ES2216861	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
Source	0021_SW153	12 May 2022	0021_SW153_220512125	ES2216861	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
Source	0021_SW153	12 May 2022	0021_SW153_220512135	ES2216861	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
Source	0021_SW153	12 May 2022	0021_SW153_220512145	ES2216861	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
Source	0021_SW153	12 Oct 2022	0021_SW153_221012	ES2237106	0.07	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	20 Apr 2023	0021_QC112_230420	ES2313364	0.10	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	20 Apr 2023	0021_QC212_230420	321517	0.1	<0.5	<0.1	<0.02	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Source	0021_SW153	20 Apr 2023	0021_SW153_230420	ES2313364	0.09	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	18 Oct 2023	0021_QC107_231018	ES2336399	0.04	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	18 Oct 2023	0021_QC207_231018	335876	0.08	<0.5	<0.1	<0.02	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Source	0021_SW153	18 Oct 2023	0021_SW153_231018	ES2336399	0.05	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	10 Apr 2024	0021_SW153_240410	ES2412012	0.04	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Source	0021_SW153	31 Mar 2025	0021_QC102_250331	ES2510113	<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
Source	0021_SW153	31 Mar 2025	0021_QC202_250331	1210052	0.02	<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
Source	0021_SW153	31 Mar 2025	0021_SW153_250331	ES2510623	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
Pathway	0021_MW021	01 May 2017	MW021	ES1710866	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Pathway	0021_MW021	25 Oct 2024	0021_MW021_241025	ES2435541	<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
Pathway	0021_MW021	25 Oct 2024	0021_QC161_241025	ES2435541	<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
Pathway	0021_MW021	25 Oct 2024	0021_QC261_241025	1156146	<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
Pathway	0021_MW021	01 Apr 2025	0021_MW021_250401	ES2510113	<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
Pathway	0021_MW060	23 Jun 2021	0021_MW060_210623	ES2123994	<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
Pathway	0021_MW060	22 Nov 2021	0021_MW060_211122	ES2142514	<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
Pathway	0021_MW060	25 Oct 2024	0021_MW060_241025	ES2435541	<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
Pathway	0021_MW060	30 Jan 2025	0021_MW060_250130	ES2503552	<0.02	<0.05	<0.02	<0.02	<0.05	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_MW060	01 Apr 2025	0021_MW060_250401	ES2510113	<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
Pathway	0021_MW070	23 Jun 2021	0021_MW070_210623	ES2123994	0.10	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_MW070	22 Nov 2021	0021_QC202_211122	845848	0.07	<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
Pathway	0021_MW070	23 Nov 2021	0021_MW070_211123	ES2142514	0.08	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_MW070	25 Oct 2024	0021_MW070_241025	ES2435541	0.05	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_MW070	30 Jan 2025	0021_MW070_250130	ES2503552	0.06	<0.05	<0.02	<0.02	<0.05	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_MW070	07 Apr 2025	0021_MW070_250407	ES2510113	0.07	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_MW071	23 Jun 2021	0021_MW071_210623	ES2123994	0.08	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_MW071	23 Nov 2021	0021_MW071_211123	ES2142514	0.08	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_MW071	23 Nov 2021	0021_QC102_211123	ES2142514	0.10	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05

					xylic Acids					PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	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 (FOSA)	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					0.0005	0.0005	0.0005	0.0005	0.05	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 2025 Freshwater and Interim Marine 95%																				
PFAS NEMP 2025 Recreational water quality																				
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																
Pathway	0021_MW071	25 Oct 2024	0021_MW071_241025	ES2435541	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
Pathway	0021_MW071	30 Jan 2025	0021_MW071_250130	ES2503552	0.10	<0.05	<0.02	<0.02	<0.05	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_MW071	07 Apr 2025	0021_MW071_250407	ES2510113	0.08	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_MW072	23 Jun 2021	0021_MW072_210623	ES2123994	0.14	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_MW072	23 Nov 2021	0021_MW072_211123	ES2142514	0.12	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_MW072	25 Oct 2024	0021_MW072_241025	ES2435541	0.10	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_MW072	30 Jan 2025	0021_MW072_250130	ES2503552	0.12	<0.05	<0.02	<0.02	<0.05	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_MW072	07 Apr 2025	0021_MW072_250407	ES2510113	0.09	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_MW112	28 Apr 2017	B_MW03	ES1710200	0.0013	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Pathway	0021_MW112	24 Jun 2021	0021_MW112_210624	ES2123994	<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
Pathway	0021_MW112	20 Oct 2021	0021_MW112_211020	ES2138639	<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
Pathway	0021_MW112	23 Nov 2021	0021_MW112_211123	ES2142514	<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
Pathway	0021_MW112	07 Apr 2022	0021_MW112_220407	ES2212442	<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
Pathway	0021_MW112	07 Apr 2022	0021_QC210_220407	293031	<0.02	<0.5	<0.1	<0.02	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Pathway	0021_MW112	12 Oct 2022	0021_MW112_221012	ES2237106	<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
Pathway	0021_MW112	18 Apr 2023	0021_MW112_230418	ES2313364	<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
Pathway	0021_MW112	16 Oct 2023	0021_MW112_231016	ES2336398	<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
Pathway	0021_MW112	08 Apr 2024	0021_MW112_240408	ES2411994	<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
Pathway	0021_MW112	24 Oct 2024	0021_MW112_241024	ES2435541	<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
Pathway	0021_MW112	30 Jan 2025	0021_MW112_250130	ES2503552	<0.02	<0.05	<0.02	<0.02	<0.05	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	0.44	<0.05	<0.05
Pathway	0021_MW112	01 Apr 2025	0021_MW112_250401	ES2510113	<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
Pathway	0021_MW112	01 Apr 2025	0021_QC154_250401	ES2510113	<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
Pathway	0021_MW113	28 Apr 2017	B_MW04	ES1710200	0.0033	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Pathway	0021_MW113	02 May 2018	B_MW04_180502	ES1812871	<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
Pathway	0021_MW113	23 Jun 2021	0021_MW113_210623	ES2123994	<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
Pathway	0021_MW113	20 Oct 2021	0021_MW113_211020	ES2138639	<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
Pathway	0021_MW113	23 Nov 2021	0021_MW113_211123	ES2142514	<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
Pathway	0021_MW113	07 Apr 2022	0021_MW113_220407	ES2212442	<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
Pathway	0021_MW113	13 Oct 2022	0021_MW113_221013	ES2237106	<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
Pathway	0021_MW113	19 Apr 2023	0021_MW113_230419	ES2313364	<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
Pathway	0021_MW113	18 Oct 2023	0021_MW113_231018	ES2336398	<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
Pathway	0021_MW113	10 Apr 2024	0021_MW113_240410	ES2411994	<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
Pathway	0021_MW113	24 Oct 2024	0021_MW113_241024	ES2435541	<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
Pathway	0021_MW113	24 Oct 2024	0021_QC109_241024	ES2435541	<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
Pathway	0021_MW113	24 Oct 2024	0021_QC209_241024	1156160	<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
Pathway	0021_MW113	30 Jan 2025	0021_MW113_250130	ES2503552	<0.02	<0.05	<0.02	<0.02	<0.05	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_MW113	30 Jan 2025	0021_MW113_250130	ES2503552	<0.02	<0.05	<0.02	<0.02	<0.05	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_MW113	07 Apr 2025	0021_MW113_250407	ES2510113	<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
Pathway	0021_MW133	11 Apr 2018	MC_MW04_180411	ES1810721	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Pathway	0021_MW133	02 May 2018	MC_MW04_180502	ES1812871	<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
Pathway	0021_MW133	11 Oct 2022	0021_MW133_221012	ES2237106	<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
Pathway	0021_MW133	18 Apr 2023	0021_MW133_230418	ES2313364	<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
Pathway	0021_MW133	17 Oct 2023	0021_MW133_231017	ES2336398	<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
Pathway	0021_MW133	09 Apr 2024	0021_MW133_240409	ES2411994	<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
Pathway	0021_MW133	23 Oct 2024	0021_MW133_241023	ES2435078	<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
Pathway	0021_MW133	02 Apr 2025	0021_MW133_250402	ES2510113	<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
Pathway	0021_SW010	12 Apr 2017	B_SW01	ES1709064	0.0128	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.0046	<0.001	<0.001	<0.001	<0.001
Pathway	0021_SW010	01 May 2018	B_SW01_180501	ES1812871	0.0305	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	0.003	<0.001	<0.001
Pathway	0021_SW010	20 Oct 2021	0021_SW010_211020	ES2138639	0.03	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_SW010	22 Nov 2021	0021_SW010_211122	ES2142514	<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
Pathway	0021_SW010	07 Apr 2022	0021_SW010_220407	ES2212442	<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
Pathway	0021_SW010	12 May 2022	0021_SW010_220512	ES2216861	<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
Pathway	0021_SW010	12 Oct 2022	0021_SW010_221012	ES2237106	0.05	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_SW010	02 Feb 2023	0021_SW010_230202	ES2303445	<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
Pathway	0021_SW010	09 Mar 2023	0021_SW010_230309	ES2308203	<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
Pathway	0021_SW010	19 Apr 2023	0021_SW010_230419	ES2313364	<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
Pathway	0021_SW010	01 May 2023	0021_SW010_230501	ES2314437	<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
Pathway	0021_SW010	06 Jun 2023	0021_QC100_230606	ES2319084	<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
Pathway	0021_SW010	06 Jun 2023	0021_SW010_230606	ES2319084	<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
Pathway	0021_SW010	08 Aug 2023	0021_SW010_230808	ES2326813	<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
Pathway	0021_SW010	12 Dec 2023	0021_SW010_231212	ES2343587	0.08	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_SW010	10 Apr 2024	0021_SW010_240410	ES2412012	<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
Pathway	0021_SW010	30 Jan 2025	0021_SW010_250130	ES2503552	<0.02	<0.05	<0.02	<0.02	<0.05	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_SW010	04 Apr 2025	0021_SW010_250404	ES2510622	0.04	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_SW018	13 Apr 2017	DC_SW03	ES1709064	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Pathway	0021_SW018	20 Oct 2021	0021_SW018_211020	ES2138639	<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
Pathway	0021_SW018	06 Apr 2022	0021_QC106_220406	ES2212442	<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

					xylic Acids					PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	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 (FOSA)	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					0.0005	0.0005	0.0005	0.0005	0.05	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 2025 Freshwater and Interim Marine 95%																				
PFAS NEMP 2025 Recreational water quality																				
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																
Pathway	0021_SW018	06 Apr 2022	0021_SW018_220406	ES2212442	<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
Pathway	0021_SW018	14 Oct 2022	0021_QC207_221014	308187	<0.02	<0.5	<0.1	<0.02	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Pathway	0021_SW018	14 Oct 2022	0021_SW018_221014	ES2237106	<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
Pathway	0021_SW018	21 Apr 2023	0021_SW018_230421	ES2313364	<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
Pathway	0021_SW018	19 Oct 2023	0021_SW018_231019	ES2336399	<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
Pathway	0021_SW018	02 Apr 2025	0021_SW018_250402	ES2510622	<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
Pathway	0021_SW044	23 Mar 2018	MC_SW02_180323	ES1809241	0.0012	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Pathway	0021_SW044	30 Apr 2018	MC_SW02_180430	ES1812871	0.0082	<0.0050[#2]	<0.0020[#2]	<0.0020[#2]	-	<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]
Pathway	0021_SW044	12 May 2022	0021_SW044_220512	ES2216861	<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
Pathway	0021_SW044	11 Oct 2022	0021_SW044_221011	ES2237106	<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
Pathway	0021_SW044	18 Apr 2023	0021_SW044_230418	ES2313364	<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
Pathway	0021_SW044	17 Oct 2023	0021_SW044_231017	ES2336399	<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
Pathway	0021_SW044	09 Apr 2024	0021_QC203_240409	348825	<0.02	<0.5	<0.1	<0.02	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Pathway	0021_SW044	09 Apr 2024	0021_SW044_240409	ES2412012	<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
Pathway	0021_SW044	28 Oct 2024	0021_SW044_241028	ES2435541	<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
Pathway	0021_SW044	01 Apr 2025	0021_SW044_250401	ES2510622	<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
Pathway	0021_SW045	23 Mar 2018	MC_SW03_180323	ES1809241	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Pathway	0021_SW045	30 Apr 2018	MC_SW03_180430	ES1812871	<0.0020[#2]	<0.0050[#2]	<0.0020[#2]	<0.0020[#2]	-	<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]
Pathway	0021_SW045	12 May 2022	0021_SW045_220512	ES2216861	<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
Pathway	0021_SW045	11 Oct 2022	0021_SW045_221011	ES2237106	<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
Pathway	0021_SW045	18 Apr 2023	0021_SW045_230418	ES2313364	<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
Pathway	0021_SW045	17 Oct 2023	0021_QC102_231017	ES2336399	<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
Pathway	0021_SW045	17 Oct 2023	0021_QC202_231017	335876	<0.02	<0.5	<0.1	<0.02	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Pathway	0021_SW045	17 Oct 2023	0021_SW045_231017	ES2336399	<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
Pathway	0021_SW045	09 Apr 2024	0021_SW045_240409	ES2412012	<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
Pathway	0021_SW045	23 Oct 2024	0021_SW045_241023	ES2435078	<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
Pathway	0021_SW045	01 Apr 2025	0021_SW045_250401	ES2510622	<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
Pathway	0021_SW048	06 Apr 2018	MC_SW06_180406	ES1810551	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Pathway	0021_SW048	12 Oct 2022	0021_SW048_221012	ES2237106	<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
Pathway	0021_SW048	19 Apr 2023	0021_SW048_230419	ES2313364	<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
Pathway	0021_SW048	18 Oct 2023	0021_SW048_231017	ES2336399	<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
Pathway	0021_SW048	10 Apr 2024	0021_SW048_240410	ES2412012	<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
Pathway	0021_SW048	25 Oct 2024	0021_SW048_241025	ES2435541	<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
Pathway	0021_SW048	03 Apr 2025	0021_SW048_250403	ES2510622	<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
Pathway	0021_SW053	30 Apr 2018	MC_SW11_180430	ES1812871	0.0112	<0.0050[#2]	<0.0020[#2]	<0.0020[#2]	-	<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]
Pathway	0021_SW053	12 May 2022	0021_SW053_220512	ES2216861	<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
Pathway	0021_SW053	11 Oct 2022	0021_SW053_221011	ES2237106	<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
Pathway	0021_SW053	02 Feb 2023	0021_SW053_230202	ES2303445	<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
Pathway	0021_SW053	09 Mar 2023	0021_QC200_230309	972744	<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
Pathway	0021_SW053	09 Mar 2023	0021_SW053_230309	ES2308203	<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
Pathway	0021_SW053	18 Apr 2023	0021_QC101_230418	ES2313364	<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
Pathway	0021_SW053	18 Apr 2023	0021_QC201_230418	321517	<0.02	<0.5	<0.1	<0.02	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.01	<0.01	<0.02	<0.02
Pathway	0021_SW053	18 Apr 2023	0021_SW053_230418	ES2313364	<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
Pathway	0021_SW053	01 May 2023	0021_SW053_230501	ES2314437	<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
Pathway	0021_SW053	06 Jun 2023	0021_QC200_230606	998496	0.01[#1]	<0.01	<0.01	<0.01	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.01	<0.01
Pathway	0021_SW053	06 Jun 2023	0021_SW053_230606	ES2319084	<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
Pathway	0021_SW053	08 Aug 2023	0021_QC200_230808	1016825	<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
Pathway	0021_SW053	08 Aug 2023	0021_SW053_230808	ES2326813	<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
Pathway	0021_SW053	17 Oct 2023	0021_SW053_231017	ES2336399	<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
Pathway	0021_SW053	12 Dec 2023	0021_QC100_231212	ES2343587	<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
Pathway	0021_SW053	12 Dec 2023	0021_SW053_231212	ES2343587	<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
Pathway	0021_SW053	09 Apr 2024	0021_QC103_240409	ES2412012	<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
Pathway	0021_SW053	09 Apr 2024	0021_SW053_240409	ES2412012	<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
Pathway	0021_SW053	23 Oct 2024	0021_SW053_241023	ES2435078	<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
Pathway	0021_SW053	29 Jan 2025	0021_QC100_250129	ES2503552	<0.02	<0.05	<0.02	<0.02	<0.05	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Pathway	0021_SW053	29 Jan 2025	0021_QC200_250129	1187025	0.02	<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
Pathway	0021_SW053	29 Jan 2025	0021_SW053_250129	ES2503552	<0.02	<0.05	<0.02	<0.02	<0.05	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05

					xylic Acids					PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	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 (FOSA)	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					0.0005	0.0005	0.0005	0.0005	0.05	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 2025 Freshwater and Interim Marine 95%																				
PFAS NEMP 2025 Recreational water quality																				
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																
Pathway	0021_SW053	01 Apr 2025	0021_SW053_250401	ES2510622	<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
Receptor	0021_SW012	11 Apr 2017	B_SW03	ES1708884	0.124	<0.0005	<0.0005	0.0007	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.0165	<0.001	0.005	<0.001	<0.001
Receptor	0021_SW043	20 Mar 2018	MC_SW01_180320	ES1808818	0.0039	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Receptor	0021_SW043	01 May 2018	MC_SW01_180501	ES1812871	0.0082	<0.0050#2	<0.0020#2	<0.0020#2	-	<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
Receptor	0021_SW043	12 May 2022	0021_SW043_220512	ES2216861	<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
Receptor	0021_SW043	12 Oct 2022	0021_SW043_221012	ES2237106	<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
Receptor	0021_SW043	18 Apr 2023	0021_SW043_230418	ES2313364	<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
Receptor	0021_SW043	17 Oct 2023	0021_SW043_231017	ES2336399	<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
Receptor	0021_SW043	09 Apr 2024	0021_SW043_240409	ES2412012	<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
Receptor	0021_SW043	23 Oct 2024	0021_QC106_241023	ES2435078	<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
Receptor	0021_SW043	23 Oct 2024	0021_QC206_241023	1154751	<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
Receptor	0021_SW043	23 Oct 2024	0021_SW043_241023	ES2435078	<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
Receptor	0021_SW043	29 Jan 2025	0021_SW043_250129	ES2503552	<0.02	<0.05	<0.02	<0.02	<0.05	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Receptor	0021_SW043	01 Apr 2025	0021_SW043_250401	ES2510622	<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
Receptor	0021_SW051	28 Mar 2018	MC_QC109_180328	ES1809328	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Receptor	0021_SW051	28 Mar 2018	MC_SW09_180328	ES1809328	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Receptor	0021_SW051	12 May 2022	0021_SW051_220512	ES2216861	<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
Receptor	0021_SW051	23 Oct 2024	0021_SW051_241023	ES2435078	<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
Receptor	0021_SW051	03 Apr 2025	0021_SW051_250403	ES2510622	<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
Receptor	0021_SW052	20 Mar 2018	MC_SW10_180320	ES1808818	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Receptor	0021_SW052	28 Mar 2018	MC_SW10_180328	ES1809328	0.0027	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Receptor	0021_SW052	12 May 2022	0021_SW052_220512	ES2216861	<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
Receptor	0021_SW052	12 Oct 2022	0021_SW052_221012	ES2237106	<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
Receptor	0021_SW052	18 Apr 2023	0021_SW052_230418	ES2313364	<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
Receptor	0021_SW052	17 Oct 2023	0021_SW052_231017	ES2336399	<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
Receptor	0021_SW052	09 Apr 2024	0021_SW052_240409	ES2412012	<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
Receptor	0021_SW052	23 Oct 2024	0021_SW052_241023	ES2435078	<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
Receptor	0021_SW052	29 Jan 2025	0021_SW052_250129	ES2503552	<0.02	<0.05	<0.02	<0.02	<0.05	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Receptor	0021_SW052	01 Apr 2025	0021_SW052_250401	ES2510622	<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
Receptor	0021_SW211	23 Oct 2024	0021_SW211_241023	ES2435078	<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
Receptor	0021_SW211	03 Apr 2025	0021_SW211_250403	ES2510623	<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	551	551	551	551	23	551	551	551	551	551	551	551	551	551	551	551
Number of Detects	264	0	0	5	0	0	0	0	0	0	0	15	0	17	2	1
Minimum Concentration	<0.0005	<0.0005	<0.0005	<0.0005	<0.05	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	0.001	<0.001
Minimum Detect	0.0012	ND	ND	0.0007	ND	ND	ND	ND	ND	ND	ND	0.0008	ND	0.003	0.001	0.006
Maximum Concentration	3.15	<0.5	<0.1	<0.1	<0.05	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.1	<0.5	<0.1	<0.1
Maximum Detect	3.15	ND	ND	0.07	ND	ND	ND	ND	ND	ND	ND	0.02	ND	0.44	0.023	0.006
Average Concentration *	0.09	0.029	0.01	0.009	0.025	0.023	0.01	0.03	0.023	0.01	0.023	0.011	0.021	0.024	0.021	0.021
Geometric Average *	0.023	0.016	0.0072	0.0069	0.025	0.018	0.0076	0.019	0.018	0.0076	0.018	0.0084	0.015	0.017	0.015	0.015
Median Concentration *	0.01	0.025	0.01	0.01	0.025	0.025	0.01	0.025	0.025	0.01	0.025	0.01	0.025	0.025	0.025	0.025
Standard Deviation *	0.27	0.042	0.0081	0.0047	0	0.0094	0.0061	0.041	0.008	0.0061	0.008	0.0093	0.009	0.022	0.0087	0.0087
Geometric Standard Deviation *	4.6	3.9	3	2.8	1	3	2.9	3.2	2.9	2.9	2.9	2.7	3.3	2.9	3.2	3.2
95% UCL (Student's-t) *	0.109	0.0317	0.0107	0.00932	0.025	0.0241	0.0105	0.0329	0.0232	0.0105	0.0232	0.0121	0.0213	0.0251	0.0215	0.0214
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	48	0	0	1	0	0	0	0	0	0	0	3	0	3	0	0
% of Non-Detects	52	100	100	99	100	100	100	100	100	100	100	97	100	97	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 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

Environmental Standards

HEPA, March 2025, PFAS NEMP 2025 Freshwater and Interim Marine 95%
HEPA, March 2025, PFAS NEMP 2025 Recreational water quality

Appendix B
Table B5g
Historical Surface water and Groundwater Analytical Results: Summercloud Creek

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids						PFAS - Perfl				
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	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	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	0.0005	0.002	0.0005	0.0005	0.0005	0.0005
PFAS NEMP 2025 Freshwater and Interim Marine 95%					0.13		220																
PFAS NEMP 2025 Recreational water quality					2	2	10	2															
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																			
Pathway	0021_MW022	04 May 2017	MW022	ES1711220	1.21	1.55	0.105	2.76	3.36	3.06	-	-	0.049	<0.0005	-	0.156	-	0.145	<0.002	<0.0005	<0.0005	0.0167	0.102
		20 Oct 2021	0021_MW022_211020	ES2138639	0.69	0.92	0.04	1.61	1.83	1.72	-	-	<0.02	<0.02	-	0.07	-	0.04	<0.1	<0.02	<0.02	<0.02	0.07
		21 Dec 2021	0021_MW022_211221	ES2147061	0.72	1.04	0.06	1.76	2.07	1.94	-	-	<0.02	<0.02	-	0.09	-	0.04	<0.1	<0.02	<0.02	<0.02	0.10
		07 Apr 2022	0021_MW022_220407	ES2212442	0.69	0.90	0.06	1.59	1.89	1.76	-	-	0.02	<0.02	-	0.08	-	0.05	<0.1	<0.02	<0.02	<0.02	0.09
			0021_QC110_220407	ES2212442	0.62	0.88	0.04	1.50	1.75	1.63	-	-	<0.02	<0.02	-	0.08	-	0.04	<0.1	<0.02	<0.02	<0.02	0.09
		12 Oct 2022	0021_MW022_221012	ES2237106	1.32	1.05	0.09	2.37	2.79	2.64	-	-	<0.02	<0.02	-	0.11	-	0.04	<0.1	<0.02	<0.02	0.03	0.12
			0021_QC208_221012	308187	1.1	1.0	0.1	2.1	2.5	-	1.2	-	0.01	<0.02	-	0.11	-	0.05	<0.02	<0.02	<0.05	0.03	0.12
		17 Apr 2023	0021_MW022_230417	ES2313364	1.95	1.50	0.12	3.45	4.02	3.80	-	-	<0.02	<0.02	-	0.16	-	0.06	<0.1	<0.02	<0.02	0.03	0.16
		16 Oct 2023	0021_MW022_231016	ES2336398	1.18	0.84	0.07	2.02	2.31	2.20	-	-	<0.02	<0.02	-	0.08	-	0.03	<0.1	<0.02	<0.02	<0.02	0.09
		08 Apr 2024	0021_MW022_240408	ES2411994	0.82	0.71	0.04	1.53	1.70	1.62	-	-	<0.02	<0.02	-	0.06	-	0.02	<0.1	<0.02	<0.02	<0.02	0.05
			0021_QC101_240408	ES2411994	0.86	0.74	0.05	1.60	1.79	1.70	-	-	<0.02	<0.02	-	0.06	-	0.03	<0.1	<0.02	<0.02	<0.02	0.05
			0021_QC201_240408	348825	0.66	0.67	0.04	1.3	1.5	-	0.70	-	<0.01	<0.02	-	0.05	-	0.02	<0.02	<0.02	<0.05	0.01	0.06
		24 Oct 2024	0021_MW022_241024	ES2435541	0.70	0.64	0.04	1.34	1.52	1.43	-	-	<0.02	<0.02	-	0.06	-	0.03	<0.1	<0.02	<0.02	<0.02	0.05
		01 Apr 2025	0021_MW022_250401	ES2510113	0.72	0.73	0.04	1.45	1.62	1.53	-	-	<0.02	<0.02	-	0.06	-	0.03	<0.1	<0.02	<0.02	<0.02	0.04
	0021_MW131	11 Apr 2018	MC_MW02_180411	ES1810721	0.0151	0.0181	<0.0005	0.0332	0.0378	0.0345	-	-	0.0013	<0.0005	-	0.0012	-	0.0021	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		02 May 2018	MC_MW02_180502	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]	-	<0.05[#1]	<0.2[#1]	<0.05[#1]	<0.05[#1]	<0.05[#1]	<0.05[#1]
		18 Oct 2023	0021_MW131_231017	ES2336398	0.10	0.08	<0.01	0.18	0.20	0.20	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	0.02
		09 Apr 2024	0021_MW131_240409	ES2411994	0.07	0.12	<0.01	0.19	0.19	0.19	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02
		23 Oct 2024	0021_MW131_241023	ES2435078	0.14	0.15	<0.01	0.29	0.31	0.31	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	0.02
		01 Apr 2025	0021_MW131_250401	ES2510113	0.05	0.04	<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
			0021_QC134_250401	ES2510113	0.16	0.16	0.02	0.32	0.34	0.34	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02
			0021_QC234_250401	1210052	0.05	0.04	<0.01	0.09	0.1	0.1	0.05	0.09	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	0.01
	0021_MW132	11 Apr 2018	MC_MW03_180411	ES1810721	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	<0.0003	-	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		12 Oct 2022	0021_MW132_221012	ES2237106	<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
			0021_QC203_221012	308187	<0.01	<0.01	<0.01	<0.01	0.01	-	<0.01	-	<0.01	<0.02	-	<0.01	-	<0.01	<0.02	<0.02	<0.05	<0.01	<0.01
		18 Apr 2023	0021_MW132_230418	ES2313364	<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
		17 Oct 2023	0021_MW132_231017	ES2336398	<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
			0021_QC104_231017	ES2336399	<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
			0021_QC204_231017	335876	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.01	<0.02	-	<0.01	-	<0.01	<0.02	<0.02	<0.05	<0.01	<0.01
		09 Apr 2024	0021_MW132_240409	ES2411994	<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
		23 Oct 2024	0021_MW132_241023	ES2435078	<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
		01 Apr 2025	0021_MW132_250401	ES2510113	<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
	0021_SW057	23 Mar 2018	SC_QC106_180323	ES1809241	0.0007	<0.0005	<0.0005	0.0007	0.0007	0.0007	-	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
			SC_SW02_180323	ES1809241	0.0008	<0.0005	<0.0005	0.0008	0.0008	0.0008	-	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		12 Oct 2022	0021_SW057_221012	ES2237106	<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
		18 Apr 2023	0021_SW057_230418	ES2313364	<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
		17 Oct 2023	0021_SW057_231017	ES2336399	<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
		09 Apr 2024	0021_SW057_240409	ES2412012	<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
		23 Oct 2024	0021_SW057_241023	ES2435078	<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
		01 Apr 2025	0021_SW057_250401	ES2510622	<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
	0021_SW058	23 Mar 2018	SC_SW03_180323	ES1809241	0.0005	<0.0005	<0.0005	0.0005	0.0005	0.0005	-	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		12 Oct 2022	0021_SW058_221012	ES2237106	<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
		18 Apr 2023	0021_SW058_230418	ES2313364	<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
		17 Oct 2023	0021_SW058_231017	ES2336399	<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
		09 Apr 2024	0021_SW058_240409	ES2412012	<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
		24 Oct 2024	0021_SW058_241024	ES2435541	<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
		01 Apr 2025	0021_SW058_250401	ES2510622	<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
	0021_SW059	22 Oct 2021	0021_SW059_211022	ES2138639	<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
		07 Apr 2022	0021_SW059_220407	ES2212442	<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
		13 Oct 2022	0021_SW059_221013	ES2237106	<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
		17 Apr 2023	0021_SW059_230417	ES2313364	<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

Appendix B
Table B5g
Historical Surface water and Groundwater Analytical Results: Summercloud Creek

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids						PFAS - Perfl				
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	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	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	0.0005	0.002	0.0005	0.0005	0.0005	0.0005
PFAS NEMP 2025 Freshwater and Interim Marine 95%					0.13		220																
PFAS NEMP 2025 Recreational water quality					2	2	10	2															
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																			
Pathway	0021_SW059	10 Apr 2024	0021_SW059_240410	ES2412012	<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
		04 Apr 2025	0021_SW059_250404	ES2510622	<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
	0021_SW085	28 Mar 2018	UN3_SW05_180328	ES1809328	0.0006	<0.0005	<0.0005	0.0006	0.0006	0.0006	-	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		12 Oct 2022	0021_SW085_221012	ES2237106	<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
		18 Apr 2023	0021_SW085_230418	ES2313364	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
		17 Oct 2023	0021_SW085_231017	ES2336399	0.01	0.01	<0.01	0.02	0.02	0.02	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02
		09 Apr 2024	0021_SW085_240409	ES2412012	<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
		23 Oct 2024	0021_SW085_241023	ES2435078	<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
		01 Apr 2025	0021_SW085_250401	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	<0.02	<0.02	<0.02
Receptor	0021_SW056	23 Mar 2018	SC_SW01_180323	ES1809241	0.0043	0.0012	<0.0005	0.0055	0.0055	0.0055	-	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
		12 Oct 2022	0021_SW056_221012	ES2237106	<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
		18 Apr 2023	0021_SW056_230418	ES2313364	<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
		17 Oct 2023	0021_SW056_231017	ES2336399	<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
		09 Apr 2024	0021_SW056_240409	ES2412012	<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
		23 Oct 2024	0021_QC255_241023	1154751	<0.01	<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	<0.05	<0.01	<0.01	<0.01	<0.01
			0021_SW056_241023	ES2435078	<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
		29 Jan 2025	0021_SW056_250129	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	<0.1	<0.02	<0.02	<0.02	<0.02
		01 Apr 2025	0021_SW056_250401	ES2510622	<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
	0021_SW188	21 Dec 2022	0021_SW188_221221	EW2205954	<0.01	0.03	<0.01	0.03	0.03	0.03	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02
		24 Oct 2024	0021_SW188_241024	ES2435541	<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
		03 Apr 2025	0021_SW188_250403	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	<0.02	<0.02	<0.02

Statistics

Number of Results	72	72	72	72	72	68	6	2	72	72	3	72	3	72	72	72	72	72	72
Number of Detects	28	25	15	30	31	28	3	1	4	0	0	15	0	15	0	0	0	5	17
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	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005
Minimum Detect	0.0005	0.0012	0.02	0.0005	0.0005	0.0005	0.05	0.09	0.0013	ND	ND	0.0012	ND	0.0021	ND	ND	ND	0.01	0.01
Maximum Concentration	1.95	1.55	0.12	3.45	4.02	3.8	1.2	0.09	<0.05	<0.05	<0.02	0.16	<0.02	0.145	<0.2	<0.05	<0.05	<0.05	0.16
Maximum Detect	1.95	1.55	0.12	3.45	4.02	3.8	1.2	0.09	0.049	ND	ND	0.16	ND	0.145	ND	ND	ND	0.03	0.16
Average Concentration *	0.2	0.2	0.016	0.39	0.45	0.39	0.33	0.048	0.0096	0.009	0.0067	0.024	0.0067	0.016	0.042	0.009	0.0098	0.0099	0.024
Geometric Average *	0.016	0.015	0.0063	0.02	0.022	0.019	0.042	0.021	0.0071	0.0066	0.0063	0.01	0.0063	0.0091	0.029	0.0066	0.0069	0.0072	0.01
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	0.01	0.05	0.01	0.01	0.01	0.01
Standard Deviation *	0.4	0.39	0.027	0.79	0.92	0.85	0.51	0.06	0.0061	0.0037	0.0029	0.035	0.0029	0.02	0.019	0.0037	0.0052	0.0056	0.034
Geometric Standard Deviation *	9.8	11	4.3	13	14	13	13	7.7	3	3.2	1.5	4.3	1.5	3.6	3.5	3.2	3.4	3.2	4.5
95% UCL (Student's-t) *	0.275	0.272	0.0217	0.542	0.629	0.562	0.745	0.316	0.0108	0.00971	0.0115	0.0309	0.0115	0.0196	0.046	0.00971	0.0108	0.011	0.0306
Number of Env Standard Exceedances	16	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Env Standard Exceedances (Detects Only)	16	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Detects	39	35	21	42	43	41	50	50	6	0	0	21	0	21	0	0	0	7	24
% of Non-Detects	61	65	79	58	57	59	50	50	94	100	100	79	100	79	100	100	100	93	76
% of Detects at or above Env Standards	22	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Results Below Env Standards or Non-Detect	78	100	100	93	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

Environmental Standards

HEPA, March 2025, PFAS NEMP 2025 Freshwater and Interim Marine 95%
HEPA, March 2025, PFAS NEMP 2025 Recreational water quality

Appendix B
Table B5g
Historical Surface water and Groundwater Analytical Results: Summercloud Creek

					uoroalkyl Carboxylic Acids						PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	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 (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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					0.0005	0.0005	0.0005	0.0005	0.0005	0.05	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 2025 Freshwater and Interim Marine 95%																					
PFAS NEMP 2025 Recreational water quality																					
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																	
Pathway	0021_MW022	04 May 2017	MW022	ES1711220	<0.0005	0.0252	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
		20 Oct 2021	0021_MW022_211020	ES2138639	<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
		21 Dec 2021	0021_MW022_211221	ES2147061	<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
		07 Apr 2022	0021_MW022_220407	ES2212442	<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
			0021_QC110_220407	ES2212442	<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
		12 Oct 2022	0021_MW022_221012	ES2237106	<0.02	0.03	<0.05	<0.02	<0.02	-	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			0021_QC208_221012	308187	<0.01	0.02	<0.5	<0.1	<0.02	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
		17 Apr 2023	0021_MW022_230417	ES2313364	<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	<0.05
		16 Oct 2023	0021_MW022_231016	ES2336398	<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
		08 Apr 2024	0021_MW022_240408	ES2411994	<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
			0021_QC101_240408	ES2411994	<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
			0021_QC201_240408	348825	<0.01	<0.02	<0.5	<0.1	<0.02	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
		24 Oct 2024	0021_MW022_241024	ES2435541	<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
		01 Apr 2025	0021_MW022_250401	ES2510113	<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
	0021_MW131	11 Apr 2018	MC_MW02_180411	ES1810721	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
		02 May 2018	MC_MW02_180502	ES1812871	<0.05[#1]	<0.05[#1]	<0.12[#1]	<0.05[#1]	<0.05[#1]	-	<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
		18 Oct 2023	0021_MW131_231017	ES2336398	<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
		09 Apr 2024	0021_MW131_240409	ES2411994	<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
		23 Oct 2024	0021_MW131_241023	ES2435078	<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
		01 Apr 2025	0021_MW131_250401	ES2510113	<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
			0021_QC134_250401	ES2510113	<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
			0021_QC234_250401	1210052	<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	<0.01	<0.05	<0.01
	0021_MW132	11 Apr 2018	MC_MW03_180411	ES1810721	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
		12 Oct 2022	0021_MW132_221012	ES2237106	<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
			0021_QC203_221012	308187	<0.01	<0.02	<0.5	<0.1	<0.02	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	0.01	<0.02
		18 Apr 2023	0021_MW132_230418	ES2313364	<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
		17 Oct 2023	0021_MW132_231017	ES2336398	<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
			0021_QC104_231017	ES2336399	<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
			0021_QC204_231017	335876	<0.01	<0.02	<0.5	<0.1	<0.02	-	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
		09 Apr 2024	0021_MW132_240409	ES2411994	<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
		23 Oct 2024	0021_MW132_241023	ES2435078	<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
		01 Apr 2025	0021_MW132_250401	ES2510113	<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
	0021_SW057	23 Mar 2018	SC_QC106_180323	ES1809241	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
			SC_SW02_180323	ES1809241	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
		12 Oct 2022	0021_SW057_221012	ES2237106	<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
		18 Apr 2023	0021_SW057_230418	ES2313364	<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
		17 Oct 2023	0021_SW057_231017	ES2336399	<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
		09 Apr 2024	0021_SW057_240409	ES2412012	<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
		23 Oct 2024	0021_SW057_241023	ES2435078	<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
		01 Apr 2025	0021_SW057_250401	ES2510622	<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
	0021_SW058	23 Mar 2018	SC_SW03_180323	ES1809241	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
		12 Oct 2022	0021_SW058_221012	ES2237106	<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
		18 Apr 2023	0021_SW058_230418	ES2313364	<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
		17 Oct 2023	0021_SW058_231017	ES2336399	<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
		09 Apr 2024	0021_SW058_240409	ES2412012	<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
		24 Oct 2024	0021_SW058_241024	ES2435541	<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
		01 Apr 2025	0021_SW058_250401	ES2510622	<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
	0021_SW059	22 Oct 2021	0021_SW059_211022	ES2138639	<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
		07 Apr 2022	0021_SW059_220407	ES2212442	<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
		13 Oct 2022	0021_SW059_221013	ES2237106	<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
		17 Apr 2023	0021_SW059_230417	ES2313364	<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

Appendix B
Table B5g
Historical Surface water and Groundwater Analytical Results: Summercloud Creek

					uoroalkyl Carboxylic Acids						PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					Perfluorononanoic acid (PFNA)	Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	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 (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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					0.0005	0.0005	0.0005	0.0005	0.0005	0.05	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
PFAS NEMP 2025 Freshwater and Interim Marine 95%																					
PFAS NEMP 2025 Recreational water quality																					
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																	
Pathway	0021_SW059	10 Apr 2024	0021_SW059_240410	ES2412012	<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
		04 Apr 2025	0021_SW059_250404	ES2510622	<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
	0021_SW085	28 Mar 2018	UN3_SW05_180328	ES1809328	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
		12 Oct 2022	0021_SW085_221012	ES2237106	<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
		18 Apr 2023	0021_SW085_230418	ES2313364	<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
		17 Oct 2023	0021_SW085_231017	ES2336399	<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
		09 Apr 2024	0021_SW085_240409	ES2412012	<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
		23 Oct 2024	0021_SW085_241023	ES2435078	<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
		01 Apr 2025	0021_SW085_250401	ES2510623	<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
Receptor	0021_SW056	23 Mar 2018	SC_SW01_180323	ES1809241	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
		12 Oct 2022	0021_SW056_221012	ES2237106	<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
		18 Apr 2023	0021_SW056_230418	ES2313364	<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
		17 Oct 2023	0021_SW056_231017	ES2336399	<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
		09 Apr 2024	0021_SW056_240409	ES2412012	<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
		23 Oct 2024	0021_QC255_241023	1154751	<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	<0.01	<0.05	<0.01
			0021_SW056_241023	ES2435078	<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
		29 Jan 2025	0021_SW056_250129	ES2503552	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		01 Apr 2025	0021_SW056_250401	ES2510622	<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
	0021_SW188	21 Dec 2022	0021_SW188_221221	EW2205954	<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
		24 Oct 2024	0021_SW188_241024	ES2435541	<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
		03 Apr 2025	0021_SW188_250403	ES2510623	<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	72	72	72	72	72	1	72	72	72	72	72	72	72	72	72	72	72
Number of Detects	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Minimum Concentration	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.05	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
Minimum Detect	ND	0.02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.01	ND
Maximum Concentration	<0.05	<0.05	<0.5	<0.1	<0.05	<0.05	<0.12	<0.05	<0.5	<0.12	<0.05	<0.12	<0.1	<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	0.01	ND
Average Concentration *	0.0087	0.01	0.035	0.011	0.009		0.024	0.0095	0.035	0.023	0.0095	0.023	0.012	0.021	0.021	0.021	0.021
Geometric Average *	0.0063	0.0075	0.016	0.0072	0.0066	0.025	0.017	0.0069	0.019	0.016	0.0069	0.016	0.0075	0.015	0.014	0.015	0.015
Median Concentration *	0.01	0.01	0.025	0.01	0.01	0.025	0.025	0.01	0.025	0.025	0.01	0.025	0.01	0.025	0.025	0.025	0.025
Standard Deviation *	0.0038	0.0062	0.053	0.01	0.0037		0.011	0.0045	0.053	0.0089	0.0045	0.0089	0.01	0.0086	0.0091	0.0086	0.0086
Geometric Standard Deviation *	3.2	3.2	5	3.5	3.2		3.6	3.3	4	3.5	3.3	3.5	3.6	3.5	3.6	3.5	3.5
95% UCL (Student's-t) *	0.00945	0.0117	0.0452	0.0132	0.00971		0.0263	0.0104	0.0457	0.0245	0.0104	0.0245	0.0138	0.0226	0.0224	0.0229	0.0226
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	8	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
% of Non-Detects	100	92	100	100	100	100	100	100	100	100	100	100	100	100	100	99	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 Reported Analyte LOR is higher than Requested Analyte LOR

Environmental Standards

HEPA, March 2025, PFAS NEMP 2025 Freshwater and Interim Marine 95%
HEPA, March 2025, PFAS NEMP 2025 Recreational water quality

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids						PFAS - Perfluoroalkyl Carboxylic Acids											
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	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)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	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	0.0005	0.002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.001	0.0005
0020_0021_Human health consumption of biota					**0.01**	**0.01**		**0.01**																						
PFAS NEMP 2025 Freshwater and Interim 95%					0.13		220																							
PFAS NEMP 2025 Recreational water quality					2	2	10	2																						
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																										
Pathway	0021_SW062	21 Oct 2021	0021_SW062_211021	ES2138639	<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	<0.05	<0.02	<0.02	<0.05	<0.02
		07 Apr 2022	0021_SW062_220407	ES2212442	<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	<0.05	<0.02	<0.02	<0.05	<0.02
		12 Oct 2022	0021_SW062_221012	ES2237106	<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	<0.05	<0.02	<0.02	<0.05	<0.02
		19 Apr 2023	0021_SW062_230419	ES2313364	<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	<0.05	<0.02	<0.02	<0.05	<0.02
		16 Oct 2023	0021_SW062_231016	ES2336399	<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	<0.05	<0.02	<0.02	<0.05	<0.02
		08 Apr 2024	0021_SW062_240408	ES2412012	<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	<0.05	<0.02	<0.02	<0.05	<0.02
		23 Oct 2024	0021_SW062_241023	ES2435078	<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	<0.05	<0.02	<0.02	<0.05	<0.02
		02 Apr 2025	0021_SW062_250402	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	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05	<0.02
	0021_SW064	20 Mar 2018	TC_SW05_180320	ES1808818	**0.0199**	**0.0201**	0.0005	**0.0400**	0.0438	0.0431	-	-	0.0007	<0.0005	-	<0.0005	-	0.0007	<0.002	<0.0005	<0.0005	<0.0005	0.0019	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005
		21 Oct 2021	0021_SW064_211021	ES2138639	<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	<0.05	<0.02	<0.02	<0.05	<0.02
		04 Apr 2022	0021_SW064_220404	ES2212442	<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	<0.05	<0.02	<0.02	<0.05	<0.02
		12 Oct 2022	0021_QC204_221012	308187	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.01	<0.02	-	<0.01	-	<0.01	<0.02	<0.02	<0.05	<0.01	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02	<0.1	<0.02
			0021_SW064_221012	ES2237106	<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	<0.05	<0.02	<0.02	<0.05	<0.02
		19 Apr 2023	0021_QC107_230419	ES2313364	<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	<0.05	<0.02	<0.02	<0.05	<0.02
			0021_QC207_230419	321517	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.01	<0.02	-	<0.01	-	<0.01	<0.02	<0.02	<0.05	<0.01	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02	<0.1	<0.02
			0021_SW064_230419	ES2313364	<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	<0.05	<0.02	<0.02	<0.05	<0.02
		08 Apr 2024	0021_SW064_240408	ES2412012	<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	<0.05	<0.02	<0.02	<0.05	<0.02
		23 Oct 2024	0021_SW064_241023	ES2435078	<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	<0.05	<0.02	<0.02	<0.05	<0.02
		02 Apr 2025	0021_QC136_250402	ES2510113	<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	<0.05	<0.02	<0.02	<0.05	<0.02
			0021_QC236_250402	1210052	<0.01	<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	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.05
			0021_SW064_250402	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	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05	<0.02
	0021_SW060	21 Mar 2018	TC_SW01_180321	ES1808818	0.0005	<0.0005	<0.0005	0.0005	0.0005	0.0005	-	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005
		21 Oct 2021	0021_QC111_211021	ES2138639	<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	<0.05	<0.02	<0.02	<0.05	<0.02
			0021_SW060_211021	ES2138639	<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	<0.05	<0.02	<0.02	<0.05	<0.02
		07 Apr 2022	0021_SW060_220407	ES2212442	<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	<0.05	<0.02	<0.02	<0.05	<0.02
		12 Oct 2022	0021_SW060_221012	ES2237106	<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	<0.05	<0.02	<0.02	<0.05	<0.02
		17 Apr 2023	0021_SW060_230417	ES2313364	<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	<0.05	<0.02	<0.02	<0.05	<0.02
		16 Oct 2023	0021_SW060_231016	ES2336399	<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	<0.05	<0.02	<0.02	<0.05	<0.02
		10 Apr 2024	0021_SW060_240410	ES2412012	<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	<0.05	<0.02	<0.02	<0.05	<0.02
		25 Oct 2024	0021_SW060_241025	ES2435541	<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	<0.05	<0.02	<0.02	<0.05	<0.02
		01 Apr 2025	0021_SW060_250401	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	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05	<0.02
Receptor	0021_SW068	21 Oct 2021	0021_QC211_211021	281322	<0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	-	<0.01	<0.02	-	<0.01	-	<0.01	<0.02	<0.02	<0.05	<0.01	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02	<0.1	<0.02
			0021_SW068_211021	ES2138639	<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	<0.05	<0.02	<0.02	<0.05	<0.02
		07 Apr 2022	0021_QC207_220407	293031	**0.02**	<0.01	<0.01	**0.02**	0.02	-	0.02	-	<0.01	<0.02	-	<0.01	-	<0.01	<0.02	<0.02	<0.05	<0.01	<0.01	<0.01	<0.02	<0.5	<0.1	<0.02	<0.1	<0.02
			0021_SW068_220407	ES2212442	**0.02**	<0.01	<0.01	**0.02**	0.02	0.02	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05	<0.02
		12 Oct 2022	0021_SW068_221012	ES2237106	<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	<0.05	<0.02	<0.02	<0.05	<0.02
		17 Apr 2023	0021_SW068_230417	ES2313364	<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	<0.05	<0.02	<0.02	<0.05	<0.02
		16 Oct 2023	0021_SW068_231016	ES2336399	<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	<0.05	<0.02	<0.02	<0.05	<0.02
		10 Apr 2024	0021_SW068_240410	ES2412012	<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	<0.05	<0.02	<0.02	<0.05	<0.02
		25 Oct 2024	0021_SW068_241025	ES2435541	<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	<0.05	<0.02	<0.02	<0.05	<0.02
		01 Apr 2025	0021_QC103_250401	ES2510113	**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	<0.05	<0.02	<0.02	<0.05	<0.02
			0021_QC203_250401	1210052	<0.01	<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	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.05
			0021_SW068_250401	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	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05	<0.02
	0021_SW069	26 Mar 2018	TC_SW10_180326	ES1809241	<0.0003	<0.0005	<0.0005	<0.0003	<0.0003	<0.0003	-	-	<0.0005	<0.0005	-	<0.0005	-	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005
		21 Oct 2021	0021_SW069_211021	ES2138639	<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	<0.05	<0.02	<0.02	<0.05	<0.02
		07 Apr 2022	0021_QC109_220407	ES2212442	<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	<0.05	<0.02	<0.02	<0.05	<0.02
			0021_SW069_220407	ES2212442	<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	<0.05	<0.02	<0.02	<0.05	<0.02
		12 Oct 2022	0021_SW069_221012	ES2237106	<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	<0.05	<0.02	<0.02	<0.05	<0.02
		17 Apr 2023	0021_SW069_230417	ES2313364	<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	<0.05	<0.02	<0.02	<0.05	<0.02
		16 Oct 2023	0021_SW069_231016	ES2336399	<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	<0.05	<0.02	<0.02	<0.05	<0.02
		10 Apr 2024	0021_SW069_240410	ES2412012	<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	<0.05	<0.02	<0.02	<0.05	<0.02
		25 Oct 2024	0021_SW069_241025	ES2435541	<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	<0.05	<0.02	<0.02	<0.05	<0.02
		01 Apr 2025	0021_SW069_250401	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	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.05	<0.02

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids						PFAS - Perfluoroalkyl Carboxylic Acids											
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	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)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	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	0.0005	0.002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.001	0.0005
0020_0021_Human health consumption of biota	**0.01**	**0.01**		**0.01**																						
PFAS NEMP 2025 Freshwater and Interim 95%	0.13		220																							
PFAS NEMP 2025 Recreational water quality	2	2	10	2																						

Statistics

Number of Results	53	53		53	53	49	6	2	53	53	2	53	2	53	53	53	53	53	53	53	53	53	53	53	53	53
Number of Detects	5	1		5	5	4	1	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0
Minimum Concentration	<0.0003	<0.0005		<0.0003	<0.0003	<0.0003	<0.01	<0.01	<0.0005	<0.0005	<0.01	<0.0005	<0.01	<0.0005	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.0005
Minimum Detect	0.0005	0.0201		0.0005	0.0005	0.0005	0.02	ND	0.0007	ND	ND	ND	ND	0.0007	ND	ND	ND	ND	0.0019	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	0.02	0.0201		0.04	<0.1	<0.05	0.02	<0.01	<0.02	<0.02	<0.01	<0.02	<0.01	<0.02	<0.1	<0.02	<0.05	<0.02	<0.02	<0.02	<0.02	<0.5	<0.1	<0.02	<0.1	<0.05
Maximum Detect	0.02	0.0201		0.04	0.0438	0.0431	0.02	ND	0.0007	ND	ND	ND	ND	0.0007	ND	ND	ND	ND	0.0019	ND	ND	ND	ND	ND	ND	ND
Average Concentration *	0.0058	0.0051		0.0061	0.0079	0.0068	0.0075	0.005	0.0089	0.0093	0.005	0.0089	0.005	0.0089	0.043	0.0093	0.01	0.0089	0.0089	0.0089	0.0093	0.04	0.012	0.0093	0.026	0.01
Geometric Average *	0.0049	0.0046		0.005	0.0054	0.0052	0.0063	0.005	0.0077	0.0079	0.005	0.0075	0.005	0.0077	0.035	0.0079	0.0085	0.0075	0.0078	0.0075	0.0079	0.022	0.0089	0.0079	0.021	0.0084
Median Concentration *	0.005	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	0.01	0.01	0.025	0.01	0.01	0.025	0.01
Standard Deviation *	0.0037	0.0023		0.0057	0.01	0.007	0.0061	0	0.0026	0.0024	0	0.0027	0	0.0026	0.015	0.0024	0.0049	0.0027	0.0026	0.0027	0.0024	0.061	0.011	0.0024	0.0091	0.0038
Geometric Standard Deviation *	2	1.8		2	2.3	2.2	1.8	1	2.2	2.4	1	2.4	1	2.2	2.7	2.4	2.5	2.4	2.1	2.4	2.4	3.7	2.7	2.4	2.6	2.4
95% UCL (Student's-t) *	0.00661	0.00563		0.00745	0.0103	0.0085	0.0125	0.005	0.0095	0.00982	0.005	0.00949	0.005	0.0095	0.0468	0.00982	0.0115	0.00949	0.0095	0.00949	0.00982	0.0539	0.0148	0.00982	0.0276	0.0109
Number of Env Standard Exceedances	4	1		4	0	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)	4	1		4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Detects	9	2		9	9	8	17	0	2	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0
% of Non-Detects	91	98		91	91	92	83	100	98	100	100	100	100	98	100	100	100	100	98	100	100	100	100	100	100	100
% of Detects at or above Env Standards	8	2		8	0	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	92	98		92	100	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.

Environmental Standards

HEPA, March 2025, PFAS NEMP 2025 Freshwater and Interim Marine 95%
HEPA, March 2025, PFAS NEMP 2025 Recreational water quality
JBRF/HMAS Creswell OMP Site Specific Criteria

					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 (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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
0020_0021_Human health consumption of biota													
PFAS NEMP 2025 Freshwater and Interim 95%													
PFAS NEMP 2025 Recreational water quality													
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**									
Pathway	0021_SW062	21 Oct 2021	0021_SW062_211021	ES2138639	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		07 Apr 2022	0021_SW062_220407	ES2212442	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		12 Oct 2022	0021_SW062_221012	ES2237106	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		19 Apr 2023	0021_SW062_230419	ES2313364	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		16 Oct 2023	0021_SW062_231016	ES2336399	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		08 Apr 2024	0021_SW062_240408	ES2412012	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		23 Oct 2024	0021_SW062_241023	ES2435078	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		02 Apr 2025	0021_SW062_250402	ES2510623	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	0021_SW064	20 Mar 2018	TC_SW05_180320	ES1808818	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
		21 Oct 2021	0021_SW064_211021	ES2138639	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		04 Apr 2022	0021_SW064_220404	ES2212442	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		12 Oct 2022	0021_QC204_221012	308187	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
			0021_SW064_221012	ES2237106	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		19 Apr 2023	0021_QC107_230419	ES2313364	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			0021_QC207_230419	321517	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
			0021_SW064_230419	ES2313364	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		08 Apr 2024	0021_SW064_240408	ES2412012	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		23 Oct 2024	0021_SW064_241023	ES2435078	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		02 Apr 2025	0021_QC136_250402	ES2510113	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			0021_QC236_250402	1210052	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.05	<0.01
			0021_SW064_250402	ES2510623	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	0021_SW060	21 Mar 2018	TC_SW01_180321	ES1808818	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
		21 Oct 2021	0021_QC111_211021	ES2138639	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			0021_SW060_211021	ES2138639	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		07 Apr 2022	0021_SW060_220407	ES2212442	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		12 Oct 2022	0021_SW060_221012	ES2237106	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		17 Apr 2023	0021_SW060_230417	ES2313364	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		16 Oct 2023	0021_SW060_231016	ES2336399	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		10 Apr 2024	0021_SW060_240410	ES2412012	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		25 Oct 2024	0021_SW060_241025	ES2435541	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		01 Apr 2025	0021_SW060_250401	ES2510623	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
Receptor	0021_SW068	21 Oct 2021	0021_QC211_211021	281322	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
			0021_SW068_211021	ES2138639	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		07 Apr 2022	0021_QC207_220407	293031	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
			0021_SW068_220407	ES2212442	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		12 Oct 2022	0021_SW068_221012	ES2237106	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		17 Apr 2023	0021_SW068_230417	ES2313364	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		16 Oct 2023	0021_SW068_231016	ES2336399	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		10 Apr 2024	0021_SW068_240410	ES2412012	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		25 Oct 2024	0021_SW068_241025	ES2435541	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		01 Apr 2025	0021_QC103_250401	ES2510113	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			0021_QC203_250401	1210052	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.01	<0.05	<0.01
			0021_SW068_250401	ES2510623	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	0021_SW069	26 Mar 2018	TC_SW10_180326	ES1809241	<0.001	<0.001	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001
		21 Oct 2021	0021_SW069_211021	ES2138639	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		07 Apr 2022	0021_QC109_220407	ES2212442	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			0021_SW069_220407	ES2212442	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		12 Oct 2022	0021_SW069_221012	ES2237106	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		17 Apr 2023	0021_SW069_230417	ES2313364	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		16 Oct 2023	0021_SW069_231016	ES2336399	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		10 Apr 2024	0021_SW069_240410	ES2412012	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		25 Oct 2024	0021_SW069_241025	ES2435541	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		01 Apr 2025	0021_SW069_250401	ES2510623	<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 sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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
0020_0021_Human health consumption of biota									
PFAS NEMP 2025 Freshwater and Interim 95%									
PFAS NEMP 2025 Recreational water quality									

Statistics

Number of Results	53	53	53	53	53	53	53	53	53
Number of Detects	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
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<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	ND	ND	ND	ND
Average Concentration *	0.041	0.024	0.01	0.024	0.013	0.022	0.021	0.022	0.022
Geometric Average *	0.024	0.02	0.0084	0.02	0.0095	0.018	0.017	0.018	0.018
Median Concentration *	0.025	0.025	0.01	0.025	0.01	0.025	0.025	0.025	0.025
Standard Deviation *	0.061	0.0057	0.0038	0.0057	0.011	0.0075	0.0082	0.0075	0.0075
Geometric Standard Deviation *	3.1	2.5	2.4	2.5	2.7	2.6	2.7	2.7	2.6
95% UCL (Student's-t) *	0.0546	0.0249	0.0109	0.0249	0.0156	0.0235	0.0232	0.0238	0.0235
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	0	0	0	0	0
% of Non-Detects	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
% 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.

Environmental Standards

HEPA, March 2025, PFAS NEMP 2025 Freshwater and Interim Marine 95%
HEPA, March 2025, PFAS NEMP 2025 Recreational water quality
JBRF/HMAS Creswell OMP Site Specific Criteria

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids						PFAS - Perfluoroalk				
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	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	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	0.0005	0.002	0.0005	0.0005	0.0005	0.0005
0020_0021_Activity specific HHRA EPC for RAN SSSS					39.7	39.7		39.7															
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																			
Tank	0021_OTH001	13 Oct 2017	A_S415_SW05	ES1725662	4.22	4.62	0.32	8.84	12.3	11.5	-	-	0.55	<0.02	-	0.28	-	0.50	<0.1	<0.02	<0.02	0.15	1.42
		21 Oct 2021	0021_OTH001_211021	ES2138639	3.54	1.95	0.13	5.49	7.06	6.72	-	-	0.18	<0.02	-	0.14	-	0.20	<0.1	<0.02	<0.02	0.06	0.64
			0021_QC210_211021	281322	3.1	1.7	0.11	4.7	6.3	-	3.2	-	0.16	<0.02	-	0.14	-	0.14	0.1	<0.02	<0.05	0.06	0.62
		05 Apr 2022	0021_OTH001_220405	ES2212442	8.76	0.81	0.08	9.57	10.6	10.3	-	-	0.17	<0.02	-	0.14	-	0.08	<0.1	<0.02	<0.02	0.02	0.45
			0021_QC202_220405	293031	7.2	0.86	0.09	8.1	9.1	-	7.3	-	0.14	<0.02	-	0.13	-	0.09	0.03	<0.02	<0.05	0.03	0.44
		13 Oct 2022	0021_OTH001_221013	ES2237106	0.84	0.37	0.03	1.21	1.47	1.41	-	-	0.03	<0.02	-	0.02	-	0.04	<0.1	<0.02	<0.02	<0.02	0.12
		20 Apr 2023	0021_OTH001_230420	ES2313364	2.24	0.90	0.07	3.14	3.76	3.61	-	-	0.06	<0.02	-	0.07	-	0.08	<0.1	<0.02	<0.02	0.03	0.26
		19 Oct 2023	0021_OTH001_231019	ES2336399	0.02	<0.01	<0.01	0.02	0.02	0.02	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02
		11 Apr 2024	0021_OTH001_240411	ES2412012	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
		25 Oct 2024	0021_OTH001_241025	ES2435541	0.04	0.03	<0.01	0.07	0.07	0.07	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02
		07 Apr 2025	0021_OTH001_250407	ES2510113	0.06	0.02	<0.01	0.08	0.08	0.08	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02
			0021_QC157_250407	ES2510113	0.06	0.01	<0.01	0.07	0.07	0.07	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02
			0021_QC257_250407	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	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01
	0021_OTH002	13 Oct 2017	A_S416_SW02	ES1725662	1.16	0.83	0.06	1.99	2.64	2.52	-	-	0.08	<0.02	-	0.04	-	0.08	<0.1	<0.02	<0.02	0.03	0.32
		21 Oct 2021	0021_OTH002_211021	ES2138639	0.71	0.39	0.05	1.10	1.51	1.44	-	-	0.04	<0.02	-	0.02	-	0.05	<0.1	<0.02	<0.02	0.02	0.19
		05 Apr 2022	0021_OTH002_220405	ES2212442	0.66	0.36	0.05	1.02	1.44	1.40	-	-	0.05	<0.02	-	<0.02	-	0.04	<0.1	<0.02	<0.02	0.02	0.23
		13 Oct 2022	0021_OTH002_221013	ES2237106	0.66	0.40	0.06	1.06	1.55	1.51	-	-	0.04	<0.02	-	<0.02	-	0.04	<0.1	<0.02	<0.02	0.02	0.29
		20 Apr 2023	0021_OTH002_230420	ES2313364	0.96	0.59	0.09	1.55	2.38	2.25	-	-	0.06	<0.02	-	0.03	-	0.07	<0.1	0.03	<0.02	0.04	0.44
		19 Oct 2023	0021_OTH002_231019	ES2336399	0.56	0.29	0.05	0.85	1.25	1.22	-	-	0.03	<0.02	-	<0.02	-	0.03	<0.1	<0.02	<0.02	<0.02	0.25
		10 Apr 2024	0021_OTH002_240410	ES2412012	0.60	0.27	0.06	0.87	1.22	1.19	-	-	0.02	<0.02	-	<0.02	-	0.03	<0.1	<0.02	<0.02	0.02	0.19
		25 Oct 2024	0021_OTH002_241025	ES2435541	0.68	0.30	0.05	0.98	1.55	1.32	-	-	0.03	<0.02	-	<0.02	-	0.03	<0.1	0.03	0.11	<0.02	0.23
		07 Apr 2025	0021_OTH002_250407	ES2510113	0.61	0.25	0.06	0.86	1.27	1.22	-	-	0.02	<0.02	-	<0.02	-	0.03	<0.1	0.02	<0.02	0.02	0.22
	0021_OTH003	16 Nov 2017	A_S426_SW01	ES1729066	6.07	4.24	0.27	10.3	13.0	12.3	-	-	0.32	<0.02	-	0.26	-	0.46	<0.1	<0.02	<0.02	0.13	1.11
		19 Oct 2021	0021_OTH003_211019	ES2138639	5.15	1.09	0.08	6.24	7.00	6.84	-	-	0.08	<0.02	-	0.08	-	0.08	<0.1	<0.02	<0.02	0.04	0.34
		05 Apr 2022	0021_OTH003_220405	ES2212442	4.54	1.79	0.12	6.33	7.78	7.47	-	-	0.21	<0.02	-	0.12	-	0.19	<0.1	<0.02	<0.02	0.05	0.67
		13 Oct 2022	0021_OTH003_221013	ES2237106	3.95	1.56	0.10	5.51	6.37	6.13	-	-	0.08	<0.02	-	0.11	-	0.13	<0.1	<0.02	<0.02	0.04	0.34
		20 Apr 2023	0021_OTH003_230420	ES2313364	12.6	3.92	0.28	16.5	18.6	18.0	-	-	0.19	<0.02	-	0.33	-	0.30	<0.1	<0.02	<0.02	0.10	0.75
		19 Oct 2023	0021_OTH003_231019	ES2336399	4.59	1.28	0.11	5.87	6.79	6.62	-	-	0.09	<0.02	-	0.11	-	0.06	<0.1	<0.02	<0.02	0.04	0.43
		11 Apr 2024	0021_OTH003_240411	ES2412012	7.18	1.87	0.13	9.05	10.1	9.67	-	-	0.08	<0.02	-	0.19	-	0.14	<0.1	<0.02	<0.02	0.05	0.30
		25 Oct 2024	0021_OTH003_241025	ES2435541	6.45	1.76	0.14	8.21	9.46	9.07	-	-	0.11	<0.02	-	0.17	-	0.14	<0.1	<0.02	<0.02	0.06	0.47
		07 Apr 2025	0021_OTH003_250407	ES2510113	3.15	1.35	0.10	4.50	6.35	6.07	-	-	0.11	<0.02	-	0.11	-	0.13	<0.1	<0.02	<0.02	0.07	0.41
	0021_OTH004	13 Oct 2017	A_S439_SW03	ES1725662	7.57	4.56	0.35	12.1	15.8	15.0	-	-	0.43	<0.02	-	0.35	-	0.44	<0.1	<0.02	<0.02	0.14	1.75
			TNQA203	ES1725662	7.64	4.36	0.37	12.0	15.7	15.0	-	-	0.45	<0.02	-	0.37	-	0.40	<0.1	<0.02	<0.02	0.13	1.70
		21 Oct 2021	0021_OTH004_211021	ES2138639	6.96	2.55	0.17	9.51	11.9	11.5	-	-	0.12	<0.02	-	0.20	-	0.20	0.1	<0.02	<0.02	0.07	1.32
		05 Apr 2022	0021_OTH004_220405	ES2212442	4.45	1.60	0.13	6.05	7.58	7.32	-	-	0.11	<0.02	-	0.13	-	0.13	<0.1	<0.02	<0.02	0.04	0.87
		13 Oct 2022	0021_OTH004_221013	ES2237106	3.70	1.60	0.10	5.30	6.56	6.33	-	-	0.07	<0.02	-	0.11	-	0.12	<0.1	<0.02	<0.02	0.04	0.71
		20 Apr 2023	0021_OTH004_230420	ES2313364	<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
		19 Oct 2023	0021_OTH004_231019	ES2336399	3.29	1.52	0.13	4.81	6.38	6.17	-	-	0.07	<0.02	-	0.11	-	0.10	<0.1	<0.02	<0.02	0.05	0.99
		11 Apr 2024	0021_OTH004_240411	ES2412012	3.66	2.11	0.15	5.77	7.55	7.23	-	-	0.10	<0.02	-	0.14	-	0.15	<0.1	<0.02	<0.02	0.06	1.01
		25 Oct 2024	0021_OTH004_241025	ES2435541	2.35	1.25	0.12	3.60	5.06	4.82	-	-	0.08	<0.02	-	0.09	-	0.12	<0.1	<0.02	<0.02	0.05	0.86
	0021_OTH005	28 Jun 2017	A_S440_SW01	ES1716199	30.3	6.68	0.622	37.0	41.0	39.7	-	-	0.332	<0.0200	-	0.858	-	0.382	<0.020	<0.0200	<0.0200	0.178	1.38
		13 Oct 2017	A_S440_SW01	ES1725662	10.6	5.11	0.42	15.7	19.9	19.0	-	-	0.46	<0.02	-	0.45	-	0.44	<0.1	<0.02	<0.02	0.15	1.97
		19 Oct 2021	0021_OTH005_211019	ES2138639	11.0	2.11	0.16	13.1	14.6	14.2	-	-	0.10	<0.02	-	0.22	-	0.15	<0.1	<0.02	<0.02	0.06	0.70
		05 Apr 2022	0021_OTH005_220405	ES2212442	3.60	0.95	0.08	4.55	5.17	5.02	-	-	0.06	<0.02	-	0.08	-	0.07	<0.1	<0.02	<0.02	0.02	0.27
			0021_QC102_220405	ES2212442	4.46	1.26	0.09	5.72	6.49	6.29	-	-	0.06	<0.02	-	0.12	-	0.08	<0.1	<0.02	<0.02	0.03	0.34
		13 Oct 2022	0021_OTH005_221013	ES2237106	7.87	1.25	0.10	9.12	9.86	9.65	-	-	0.04	<0.02	-	0.13	-	0.08	<0.1	<0.02	<0.02	0.03	0.31
			0021_QC211_221013	308187	8.1	1.4	0.13	9.5	10	-	8.2	-	0.05	<0.02	-	0.16	-	0.09	0.02	<0.02	<0.05	0.04	0.33
		20 Apr 2023	0021_OTH005_230420	ES2313364	2.63	0.49	0.04	3.12	3.35	3.27	-	-	<0.02	<0.02	-	0.05	-	0.03	<0.1	<0.02	<0.02	<0.02	0.11
		19 Oct 2023	0021_OTH005_231019	ES2336399	0.69	0.12	<0.01	0.81	0.84	0.84	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	0.03
		10 Apr 2024	0021_OTH005_240410	ES2412012	0.18	0.04	<0.01	0.22	0.22	0.22	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02
		25 Oct 2024	0021_OTH005_241025	ES2435541	0.11	0.03	<0.01	0.14	0.14	0.14	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02
		07 Apr 2025	0021_OTH005_250407	ES2510113	0.11	0.02	<0.01	0.13	0.13	0.13	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids						PFAS - Perfluoroalk				
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	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	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	0.0005	0.002	0.0005	0.0005	0.0005	0.0005
0020_0021_Activity specific HHRA EPC for RAN SSSS					39.7	39.7		39.7															
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																			
Tank	0021_OTH006	13 Oct 2017	A_S481_SW04	ES1725662	0.04	0.15	0.01	0.19	0.63	0.59	-	-	0.08	<0.02	-	<0.02	-	0.04	<0.1	<0.02	<0.02	<0.02	0.21
		21 Oct 2021	0021_OTH006_211021	ES2138639	<0.01	0.03	<0.01	0.03	0.38	0.36	-	-	0.05	<0.02	-	<0.02	-	0.02	<0.1	<0.02	<0.02	<0.02	0.19
			0021_QC110_211021	ES2138639	<0.01	0.03	<0.01	0.03	0.46	0.44	-	-	0.06	<0.02	-	<0.02	-	0.02	<0.1	<0.02	<0.02	<0.02	0.24
		05 Apr 2022	0021_OTH006_220405	ES2212442	0.47	0.15	0.01	0.62	0.90	0.90	-	-	0.05	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	0.16
		13 Oct 2022	0021_OTH006_221013	ES2237106	<0.01	0.02	<0.01	0.02	0.23	0.23	-	-	0.03	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	0.12
		20 Apr 2023	0021_OTH006_230420	ES2313364	0.02	0.03	<0.01	0.05	0.30	0.30	-	-	0.04	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	0.14
		19 Oct 2023	0021_OTH006_231019	ES2336399	<0.01	<0.01	<0.01	<0.01	0.10	0.10	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	0.07
		11 Apr 2024	0021_OTH006_240411	ES2412012	<0.01	<0.01	<0.01	<0.01	0.02	0.02	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	0.02
		25 Oct 2024	0021_OTH006_241025	ES2435541	<0.01	<0.01	<0.01	<0.01	0.02	0.02	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	0.02
			0021_QC160_241025	ES2435541	<0.01	<0.01	<0.01	<0.01	0.03	0.03	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	0.03
		07 Apr 2025	0021_OTH006_250407	ES2510113	<0.01	<0.01	<0.01	<0.01	0.02	0.02	-	-	<0.02	<0.02	-	<0.02	-	<0.02	<0.1	<0.02	<0.02	<0.02	0.02
Statistics																							
Number of Results					63	63	63	63	63	60	4	1	63	63	1	63	1	63	63	63	63	63	63
Number of Detects					54	55	43	57	62	59	4	1	46	0	0	35	0	44	4	3	1	37	53
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	<0.01	<0.01	0.02	<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	ND	0.02	0.02	0.02	0.02	0.11	0.02
Maximum Concentration					30.3	6.68	0.622	37	41	39.7	8.2	0.11	0.55	<0.02	<0.01	0.858	<0.01	0.5	0.1	0.03	0.11	0.178	1.97
Maximum Detect					30.3	6.68	0.622	37	41	39.7	8.2	0.11	0.55	ND	ND	0.858	ND	0.5	0.1	0.03	0.11	0.178	1.97
Average Concentration *					3.3	1.2	0.095	4.5	5.4	5.1	4.7		0.094	0.0099		0.1		0.1	0.05	0.011	0.012	0.039	0.43
Geometric Average *					0.59	0.28	0.038	0.87	1.4	1.2	1.8	0.11	0.048	0.0099	0.005	0.041	0.005	0.048	0.048	0.01	0.011	0.025	0.18
Median Concentration *					1.16	0.59	0.06	1.99	2.64	1.88	5.25	0.11	0.06	0.01	0.005	0.04	0.005	0.06	0.05	0.01	0.01	0.02	0.27
Standard Deviation *					4.8	1.5	0.12	6	6.9	6.8	3.8		0.12	0.00063		0.14		0.13	0.012	0.0038	0.013	0.041	0.48
Geometric Standard Deviation *					15	9.6	4.8	14	9.8	9.8	10		3.4	1.1		4.2		3.7	1.3	1.3	1.4	2.5	5.3
95% UCL (Student's-t) *					4.34	1.478	0.12	5.771	6.898	6.554	9.134		0.12	0.0101		0.13		0.128	0.0522	0.0115	0.0149	0.0474	0.53
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					86	87	68	90	98	98	100	100	73	0	0	56	0	70	6	5	2	59	84
% of Non-Detects					14	13	32	10	2	2	0	0	27	100	100	44	100	30	94	95	98	41	16
% 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.

Environmental Standards

JBRF/HMAS Creswell OMP Site Specific Criteria

					yl Carboxylic Acids					PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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					0.0005	0.0005	0.0005	0.0005	0.0005	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
0020_0021_Activity specific HHRA EPC for RAN SSSS																				
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																
Tank	0021_OTH001	13 Oct 2017	A_S415_SW05	ES1725662	<0.02	0.20	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		21 Oct 2021	0021_OTH001_211021	ES2138639	<0.02	0.14	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	0.08	<0.05
			0021_QC210_211021	281322	<0.01	0.1	<0.5	<0.1	<0.02	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	0.07	<0.02
		05 Apr 2022	0021_OTH001_220405	ES2212442	<0.02	0.05	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	0.03	<0.05	<0.05	<0.05	<0.05
			0021_QC202_220405	293031	<0.01	0.06	<0.5	<0.1	<0.02	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
		13 Oct 2022	0021_OTH001_221013	ES2237106	<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
		20 Apr 2023	0021_OTH001_230420	ES2313364	<0.02	0.05	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		19 Oct 2023	0021_OTH001_231019	ES2336399	<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
		11 Apr 2024	0021_OTH001_240411	ES2412012	<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
		25 Oct 2024	0021_OTH001_241025	ES2435541	<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
		07 Apr 2025	0021_OTH001_250407	ES2510113	<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
			0021_QC157_250407	ES2510113	<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
			0021_QC257_250407	1210052	<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	<0.01	<0.05	<0.01
	0021_OTH002	13 Oct 2017	A_S416_SW02	ES1725662	<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	<0.05
		21 Oct 2021	0021_OTH002_211021	ES2138639	<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	<0.05
		05 Apr 2022	0021_OTH002_220405	ES2212442	<0.02	0.03	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		13 Oct 2022	0021_OTH002_221013	ES2237106	<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	<0.05
		20 Apr 2023	0021_OTH002_230420	ES2313364	<0.02	0.07	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		19 Oct 2023	0021_OTH002_231019	ES2336399	<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	<0.05
		10 Apr 2024	0021_OTH002_240410	ES2412012	<0.02	0.03	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		25 Oct 2024	0021_OTH002_241025	ES2435541	<0.02	0.03	<0.05	0.04	0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		07 Apr 2025	0021_OTH002_250407	ES2510113	<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	<0.05
	0021_OTH003	16 Nov 2017	A_S426_SW01	ES1729066	<0.02	0.17	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		19 Oct 2021	0021_OTH003_211019	ES2138639	<0.02	0.06	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		05 Apr 2022	0021_OTH003_220405	ES2212442	<0.02	0.09	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		13 Oct 2022	0021_OTH003_221013	ES2237106	<0.02	0.06	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		20 Apr 2023	0021_OTH003_230420	ES2313364	<0.02	0.13	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		19 Oct 2023	0021_OTH003_231019	ES2336399	<0.02	0.08	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		11 Apr 2024	0021_OTH003_240411	ES2412012	<0.02	0.06	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		25 Oct 2024	0021_OTH003_241025	ES2435541	<0.02	0.08	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		07 Apr 2025	0021_OTH003_250407	ES2510113	<0.02	0.19	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	0.69	<0.05
	0021_OTH004	13 Oct 2017	A_S439_SW03	ES1725662	<0.02	0.25	<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
			TNQA203	ES1725662	<0.02	0.30	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		21 Oct 2021	0021_OTH004_211021	ES2138639	<0.02	0.18	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		05 Apr 2022	0021_OTH004_220405	ES2212442	<0.02	0.12	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		13 Oct 2022	0021_OTH004_221013	ES2237106	<0.02	0.11	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		20 Apr 2023	0021_OTH004_230420	ES2313364	<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
		19 Oct 2023	0021_OTH004_231019	ES2336399	<0.02	0.12	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		11 Apr 2024	0021_OTH004_240411	ES2412012	<0.02	0.14	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		25 Oct 2024	0021_OTH004_241025	ES2435541	<0.02	0.11	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
	0021_OTH005	28 Jun 2017	A_S440_SW01	ES1716199	<0.0200	0.150	<0.0500	<0.0200	<0.0200	<0.050	<0.0200	<0.050	<0.050	<0.0200	<0.050	0.0300	<0.020	<0.020	0.038	<0.020
		13 Oct 2017	A_S440_SW01	ES1725662	<0.02	0.29	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		19 Oct 2021	0021_OTH005_211019	ES2138639	<0.02	0.11	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		05 Apr 2022	0021_OTH005_220405	ES2212442	<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	<0.05
			0021_QC102_220405	ES2212442	<0.02	0.05	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		13 Oct 2022	0021_OTH005_221013	ES2237106	<0.02	0.05	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			0021_QC211_221013	308187	<0.01	0.05	<0.5	<0.1	<0.02	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
		20 Apr 2023	0021_OTH005_230420	ES2313364	<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
		19 Oct 2023	0021_OTH005_231019	ES2336399	<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
		10 Apr 2024	0021_OTH005_240410	ES2412012	<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
		25 Oct 2024	0021_OTH005_241025	ES2435541	<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
		07 Apr 2025	0021_OTH005_250407	ES2510113	<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

					yl Carboxylic Acids					PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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					0.0005	0.0005	0.0005	0.0005	0.0005	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
0020_0021_Activity specific HHRA EPC for RAN SSSS																				
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																
Tank	0021_OTH006	13 Oct 2017	A_S481_SW04	ES1725662	<0.02	0.10	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		21 Oct 2021	0021_OTH006_211021	ES2138639	<0.02	0.09	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
			0021_QC110_211021	ES2138639	<0.02	0.11	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		05 Apr 2022	0021_OTH006_220405	ES2212442	<0.02	0.06	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		13 Oct 2022	0021_OTH006_221013	ES2237106	<0.02	0.06	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		20 Apr 2023	0021_OTH006_230420	ES2313364	<0.02	0.07	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		19 Oct 2023	0021_OTH006_231019	ES2336399	<0.02	0.03	<0.05	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		11 Apr 2024	0021_OTH006_240411	ES2412012	<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
		25 Oct 2024	0021_OTH006_241025	ES2435541	<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
			0021_QC160_241025	ES2435541	<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
		07 Apr 2025	0021_OTH006_250407	ES2510113	<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	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63
Number of Detects	0	47	0	1	1	0	0	0	0	0	0	2	0	0	4	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	<0.01	<0.01	<0.01
Minimum Detect	ND	0.02	ND	0.04	0.02	ND	ND	ND	ND	ND	ND	0.03	ND	ND	0.038	ND
Maximum Concentration	<0.02	0.3	<0.5	<0.1	0.02	<0.1	<0.05	<0.5	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	0.69	<0.05
Maximum Detect	ND	0.3	ND	0.04	0.02	ND	ND	ND	ND	ND	ND	0.03	ND	ND	0.69	ND
Average Concentration *	0.0097	0.074	0.035	0.012	0.01	0.026	0.01	0.036	0.025	0.01	0.025	0.013	0.024	0.023	0.037	0.024
Geometric Average *	0.0096	0.045	0.027	0.011	0.01	0.026	0.01	0.028	0.025	0.01	0.025	0.011	0.023	0.022	0.026	0.023
Median Concentration *	0.01	0.05	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 *	0.0012	0.069	0.048	0.0093	0.0014	0.0054	0.0019	0.048	0	0.0019	0	0.0093	0.0044	0.0052	0.084	0.0044
Geometric Standard Deviation *	1.2	2.9	1.7	1.5	1.1	1.2	1.1	1.6	1	1.1	1	1.5	1.3	1.5	1.7	1.3
95% UCL (Student's-t) *	0.00994	0.0883	0.0456	0.0143	0.0104	0.0273	0.0106	0.0459	0.025	0.0106	0.025	0.0147	0.0247	0.0246	0.0544	0.0247
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	75	0	2	2	0	0	0	0	0	0	3	0	0	6	0
% of Non-Detects	100	25	100	98	98	100	100	100	100	100	100	97	100	100	94	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.

Environmental Standards

JBRF/HMAS Creswell OMP Site Specific Criteria

					PFAS			PFAS - Sums				PFAS - Perfluoroalkyl Sulfonic Acids				PFAS - Perfluoroalkyl Carboxylic Acids							
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	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)
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL					0.0003	0.0005	0.0005	0.0003	0.0003	0.0003	0.01	0.0005	0.0005	0.0005	0.0005	0.002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																			
STP	0020_SW035	12 Apr 2017	G_SW01	ES1709064	0.551	0.244	0.0180	0.795	0.915	0.866	-	0.0160	<0.0005	0.0222	0.0256	<0.002	<0.0005	<0.0005	0.0042	0.0231	<0.0005	0.0053	<0.0005
		07 Apr 2022	0020_SW035_220407	ES2212597	1.87	0.11	0.02	1.98	2.05	2.03	-	<0.02	<0.02	0.02	<0.02	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05
		17 Apr 2023	0020_SW035_230417	ES2313254	0.66	0.58	0.07	1.24	1.71	1.66	-	0.10	<0.02	0.02	0.03	<0.1	<0.02	<0.02	0.03	0.15	<0.02	0.07	<0.05
		08 Apr 2024	0020_SW035_240408	ES2411964	1.01	1.17	0.08	2.18	3.15	2.90	-	<0.02	0.03	0.03	0.04	<0.1	0.03	<0.02	0.05	0.34	0.02	0.25	<0.05
		21 Oct 2024	0020_SW035_241021	ES2435143	0.06	0.06	<0.01	0.12	0.14	0.12	-	<0.02	<0.02	0.02	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05
		31 Mar 2025	0020_SW035_250331	ES2510618	0.42	0.29	0.01	0.71	0.77	0.75	-	<0.02	<0.02	<0.02	0.02	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05
	0020_SW036	12 Apr 2017	G_SW02	ES1709064	0.765	0.488	0.0292	1.25	1.45	1.37	-	0.0258	0.0005	0.0331	0.0402	<0.002	0.0018	<0.0005	0.0092	0.0440	0.0009	0.0073	<0.0005
		18 Oct 2021	0020_QC102_211018	ES2138638	0.70	0.47	0.02	1.17	1.43	1.37	-	0.09	<0.02	0.02	0.04	<0.1	<0.02	<0.02	<0.02	0.09	<0.02	<0.02	<0.05
			0020_SW036_211018	ES2138638	0.65	0.46	0.02	1.11	1.37	1.31	-	0.09	<0.02	0.02	0.04	<0.1	<0.02	<0.02	<0.02	0.09	<0.02	<0.02	<0.05
		04 Apr 2022	0020_SW036_220404	ES2212597	0.79	0.42	0.03	1.21	1.42	1.37	-	0.04	<0.02	0.02	0.03	<0.1	<0.02	<0.02	<0.02	0.09	<0.02	<0.02	<0.05
		11 Oct 2022	0020_SW036_221011	ES2237104	0.76	0.35	0.02	1.11	1.27	1.25	-	0.06	<0.02	0.02	<0.02	<0.1	<0.02	<0.02	<0.02	0.06	<0.02	<0.02	<0.05
		17 Apr 2023	0020_SW036_230417	ES2313254	0.65	0.43	0.02	1.08	1.25	1.20	-	0.04	<0.02	0.02	0.03	<0.1	<0.02	<0.02	<0.02	0.06	<0.02	<0.02	<0.05
		16 Oct 2023	0020_SW036_ 231016	ES2336397	0.16	0.09	<0.01	0.25	0.28	0.28	-	<0.02	<0.02	<0.02	<0.02	<0.1	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.05
		08 Apr 2024	0020_SW036_240408	ES2411964	0.60	0.37	0.01	0.97	1.07	1.05	-	0.03	<0.02	<0.02	0.02	<0.1	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.05
		21 Oct 2024	0020_SW036_241021	ES2435143	0.06	0.04	<0.01	0.10	0.10	0.10	-	<0.02	<0.02	<0.02	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05
		31 Mar 2025	0020_SW036_250331	ES2510618	0.10	0.20	<0.01	0.30	0.32	0.32	-	0.02	<0.02	<0.02	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05
	0020_SW037	12 Apr 2017	G_SW03	ES1709064	0.656	0.479	0.0273	1.14	1.31	1.24	-	0.0249	<0.0005	0.0288	0.0375	<0.002	0.0013	<0.0005	0.0079	0.0405	0.0009	0.0069	<0.0005
		18 Oct 2021	0020_QC202_211018	281319	0.65	0.46	0.03	1.1	1.3	-	0.67	0.04	<0.02	0.03	0.04	<0.02	<0.02	<0.05	0.01	0.07	<0.01	<0.02	<0.5
			0020_SW037_211018	ES2138638	0.66	0.41	0.02	1.07	1.33	1.27	-	0.10	<0.02	0.02	0.04	<0.1	<0.02	<0.02	<0.02	0.08	<0.02	<0.02	<0.05
		04 Apr 2022	0020_SW037_220404	ES2212597	0.91	0.44	0.03	1.35	1.57	1.52	-	0.04	<0.02	0.02	0.03	<0.1	<0.02	<0.02	<0.02	0.10	<0.02	<0.02	<0.05
		11 Oct 2022	0020_QC202_221011	308190	0.64	0.31	0.01	0.95	1.0	-	0.65	0.01	<0.02	0.02	0.02	<0.02	<0.02	<0.05	<0.01	0.04	<0.01	<0.02	<0.5
			0020_SW037_221011	ES2237104	0.72	0.40	0.02	1.12	1.26	1.23	-	0.04	<0.02	<0.02	0.03	<0.1	<0.02	<0.02	<0.02	0.05	<0.02	<0.02	<0.05
		17 Apr 2023	0020_SW037_230417	ES2313254	0.61	0.42	0.02	1.03	1.20	1.15	-	0.04	<0.02	0.02	0.03	<0.1	<0.02	<0.02	<0.02	0.06	<0.02	<0.02	<0.05
		08 Apr 2024	0020_SW037_240408	ES2411964	0.55	0.33	0.02	0.88	0.99	0.97	-	0.03	<0.02	<0.02	0.02	<0.1	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.05
		21 Oct 2024	0020_SW037_241021	ES2435143	0.21	0.08	<0.01	0.29	0.29	0.29	-	<0.02	<0.02	<0.02	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05
		31 Mar 2025	0020_SW037_250331	ES2510618	0.31	0.18	<0.01	0.49	0.49	0.49	-	<0.02	<0.02	<0.02	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.05

Statistics

Number of Results	26	26	26	26	26	24	2	26	26	26	26	26	26	26	26	26	26	26	26
Number of Detects	26	26	20	26	26	24	2	18	2	17	18	0	3	0	6	21	3	5	0
Minimum Concentration	0.06	0.04	0.01	0.1	0.1	0.1	0.65	0.01	0.0005	0.02	0.02	<0.002	<0.0005	<0.0005	0.0042	<0.02	<0.0005	0.0053	<0.0005
Minimum Detect	0.06	0.04	0.01	0.1	0.1	0.1	0.65	0.01	0.0005	0.02	0.02	ND	0.0013	ND	0.0042	0.0231	0.0009	0.0053	ND
Maximum Concentration	1.87	1.17	0.08	2.18	3.15	2.9	0.67	0.1	0.03	0.0331	0.0402	<0.1	0.03	<0.05	0.05	0.34	0.02	0.25	<0.5
Maximum Detect	1.87	1.17	0.08	2.18	3.15	2.9	0.67	0.1	0.03	0.0331	0.0402	ND	0.03	ND	0.05	0.34	0.02	0.25	ND
Average Concentration *	0.6	0.36	0.021	0.96	1.1	1.1	0.66	0.035	0.0097	0.018	0.025	0.041	0.0097	0.01	0.012	0.062	0.0089	0.021	0.039
Geometric Average *	0.47	0.28	0.016	0.78	0.89	0.84	0.66	0.025	0.007	0.017	0.022	0.028	0.0078	0.007	0.01	0.042	0.007	0.012	0.018
Median Concentration *	0.65	0.385	0.02	1.075	1.255	1.215	0.66	0.0279	0.01	0.02	0.0278	0.05	0.01	0.01	0.01	0.04225	0.01	0.01	0.025
Standard Deviation *	0.36	0.23	0.018	0.5	0.65	0.64	0.014	0.029	0.0052	0.0071	0.012	0.018	0.005	0.0054	0.0089	0.066	0.0039	0.048	0.063
Geometric Standard Deviation *	2.3	2.2	2.2	2.2	2.3	2.4	1	2.3	3.2	1.5	1.8	3.7	2.5	3.5	1.6	2.5	2.6	2.1	5.4
95% UCL (Student's-t) *	0.727	0.433	0.0274	1.129	1.351	1.312	0.723	0.0451	0.0114	0.0206	0.0287	0.0474	0.0114	0.0118	0.0148	0.084	0.0102	0.0373	0.0604
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	100	100	77	100	100	100	100	69	8	65	69	0	12	0	23	81	12	19	0
% of Non-Detects	0	0	23	0	0	0	0	31	92	35	31	100	88	100	77	19	88	81	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			
					Perfluorotridecanoic acid (PFTrDA)	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 (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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
EQL					0.0005	0.0005	0.001	0.0005	0.001	0.001	0.0005	0.001	0.0005	0.001	0.001	0.001	0.001
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**													
STP	0020_SW035	12 Apr 2017	G_SW01	ES1709064	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.0015	<0.001	<0.001	0.004	<0.001
		07 Apr 2022	0020_SW035_220407	ES2212597	<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
		17 Apr 2023	0020_SW035_230417	ES2313254	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		08 Apr 2024	0020_SW035_240408	ES2411964	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	0.08	<0.05	<0.05	<0.05	<0.05
		21 Oct 2024	0020_SW035_241021	ES2435143	<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
		31 Mar 2025	0020_SW035_250331	ES2510618	<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_SW036	12 Apr 2017	G_SW02	ES1709064	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.0015	<0.001	<0.001	<0.001	<0.001
		18 Oct 2021	0020_QC102_211018	ES2138638	<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_SW036_211018	ES2138638	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		04 Apr 2022	0020_SW036_220404	ES2212597	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		11 Oct 2022	0020_SW036_221011	ES2237104	<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
		17 Apr 2023	0020_SW036_230417	ES2313254	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		16 Oct 2023	0020_SW036_ 231016	ES2336397	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		08 Apr 2024	0020_SW036_240408	ES2411964	<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
		21 Oct 2024	0020_SW036_241021	ES2435143	<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
		31 Mar 2025	0020_SW036_250331	ES2510618	<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_SW037	12 Apr 2017	G_SW03	ES1709064	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.0019	<0.001	<0.001	0.002	<0.001
		18 Oct 2021	0020_QC202_211018	281319	<0.1	<0.02	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
			0020_SW037_211018	ES2138638	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		04 Apr 2022	0020_SW037_220404	ES2212597	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		11 Oct 2022	0020_QC202_221011	308190	<0.1	<0.02	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.01	<0.02
			0020_SW037_221011	ES2237104	<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
		17 Apr 2023	0020_SW037_230417	ES2313254	<0.02	<0.02	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05
		08 Apr 2024	0020_SW037_240408	ES2411964	<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
		21 Oct 2024	0020_SW037_241021	ES2435143	<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
		31 Mar 2025	0020_SW037_250331	ES2510618	<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	26	26	26	26	26	26	26	26	26	26	26	26	26
Number of Detects	0	0	0	0	0	0	0	0	4	0	0	2	0
Minimum Concentration	<0.0005	<0.0005	<0.001	<0.0005	<0.001	<0.001	<0.0005	<0.001	0.0015	<0.001	<0.001	<0.001	<0.001
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	0.0015	ND	ND	0.002	ND
Maximum Concentration	<0.1	<0.02	<0.1	<0.02	<0.5	<0.05	<0.02	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	0.08	ND	ND	0.004	ND
Average Concentration *	0.012	0.0089	0.024	0.0089	0.039	0.022	0.0089	0.022	0.015	0.021	0.021	0.021	0.021
Geometric Average *	0.0074	0.0065	0.017	0.0065	0.019	0.016	0.0065	0.016	0.0099	0.015	0.014	0.016	0.015
Median Concentration *	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 *	0.012	0.0032	0.011	0.0032	0.062	0.008	0.0032	0.008	0.018	0.0086	0.0092	0.0088	0.0086
Geometric Standard Deviation *	3.7	3.3	3.7	3.3	4.4	3.6	3.3	3.6	2.4	3.6	3.7	2.7	3.6
95% UCL (Student's-t) *	0.0159	0.00994	0.0278	0.00994	0.0604	0.0248	0.00994	0.0248	0.0207	0.0239	0.0237	0.0238	0.0239
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	15	0	0	8	0
% of Non-Detects	100	100	100	100	100	100	100	100	85	100	100	92	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			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids						PFAS - Perfluoroalk				
					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)	Perfluorononane sulfonate (PFNS)	Perfluorodecanesulfonic acid (PFDS)	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)
					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	mg/kg	mg/kg	mg/kg
EQL					0.0002	0.0002	0.0002	0.0002	0.0002	0.005	0.0002	0.005	0.0002	0.005	0.0002	0.0002	0.005	0.0002	0.001	0.0002	0.0002	0.0002	0.0002
SPR Type Location		**Date**	**Field ID**	**Lab Report No.**																			
Receptor	0021_SD073	19 Mar 2018	UN3_SD03_0.0_180319	ES1808902	0.0012	0.0003	<0.0002	0.0015	0.0015	-	0.0015	-	<0.0002	-	<0.0002	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
			UN3_SD03_0.2_180319	ES1814922	<0.0002	<0.0002	<0.0002	-	<0.0002	-	<0.0002	-	<0.0002	-	-	-	-	-	<0.001	-	-	<0.0002	<0.0002
		17 May 2018	UN3_SD03_0.0_180517	ES1814324	0.0011	<0.0002	<0.0002	0.0011	0.0011	-	0.0011	-	<0.0002	-	<0.0002	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
		22 Oct 2021	0021_QC113_211022	ES2138639	0.0013	<0.0002	<0.0002	0.0013	0.0013	-	0.0013	-	<0.0002	-	<0.0002	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
			0021_SD073_211022	ES2138639	0.0012	<0.0002	<0.0002	0.0012	0.0012	-	0.0012	-	<0.0002	-	<0.0002	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
		10 Oct 2022	0021_SD073_221010	ES2237106	0.0003	<0.0002	<0.0002	0.0003	0.0003	-	0.0003	-	<0.0002	-	<0.0002	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
		18 Apr 2023	0021_SD073_230418	ES2313364	<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
		17 Oct 2023	0021_SD073_231017	ES2336399	<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
		09 Apr 2024	0021_SD073_240409	ES2411995	<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
		25 Oct 2024	0021_SD073_241025	ES2435541	<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
		04 Apr 2025	0021_QC110_250404	ES2510113	<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
			0021_QC210_250404	1210052	<0.005	<0.005	<0.005	<0.05	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
			0021_SD073_250404	ES2510622	<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

Statistics

Number of Results	18	18	18	17	18	1	18	1	18	1	17	17	1	17	18	17	17	18	18
Number of Detects	6	1	0	6	6	0	6	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.005	<0.0002	<0.005	<0.0002	<0.005	<0.0002	<0.0002	<0.005	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Minimum Detect	0.0003	0.0003	ND	0.0003	0.0003	ND	0.0003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.005	<0.005	<0.005	<0.05	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Maximum Detect	0.0013	0.0003	ND	0.0015	0.0015	ND	0.0015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *	0.00055	0.00024	0.00023	0.0019	0.00071		0.00057		0.00023		0.00024	0.00024		0.00024	0.00061	0.00024	0.00024	0.00023	0.00023
Geometric Average *	0.00025	0.00013	0.00012	0.00031	0.00027	0.0025	0.00026	0.0025	0.00012	0.0025	0.00012	0.00012	0.0025	0.00012	0.00055	0.00012	0.00012	0.00012	0.00012
Median Concentration *	0.0001	0.0001	0.0001	0.0001	0.0001	0.0025	0.0001	0.0025	0.0001	0.0025	0.0001	0.0001	0.0025	0.0001	0.0005	0.0001	0.0001	0.0001	0.0001
Standard Deviation *	0.0007	0.00056	0.00057	0.006	0.0012		0.00072		0.00057		0.00058	0.00058		0.00058	0.00047	0.00058	0.00058	0.00057	0.00057
Geometric Standard Deviation *	3.5	2.2	2.1	5	3.9		3.6		2.1		2.2	2.2		2.2	1.5	2.2	2.2	2.1	2.1
95% UCL (Student's-t) *	0.00083521	0.00047606	0.00046528	0.00445	0.0012		0.00085999		0.00046528		0.00048765	0.00048765		0.00048765	0.0008044	0.00048765	0.00048765	0.00046528	0.00046528
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	33	6	0	35	33	0	33	0	0	0	0	0	0	0	0	0	0	0	0
% of Non-Detects	67	94	100	65	67	100	67	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 Reported Analyte LOR is higher than Requested Analyte LOR

					yl Carboxylic Acids					PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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	0.0002	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
SPR Type Location		**Date**	**Field ID**	**Lab Report No.**																
Receptor	0021_SD073	19 Mar 2018	UN3_SD03_0.0_180319	ES1808902	<0.0002	<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
			UN3_SD03_0.2_180319	ES1814922	-	<0.0002	-	-	-	-	-	-	-	-	-	-	<0.0005	<0.0005	<0.0005	<0.0005
		17 May 2018	UN3_SD03_0.0_180517	ES1814324	<0.0002	<0.0002	<0.0006[#1]	<0.0002	<0.0002	<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
		22 Oct 2021	0021_QC113_211022	ES2138639	<0.0002	<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
			0021_SD073_211022	ES2138639	<0.0002	<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
		10 Oct 2022	0021_SD073_221010	ES2237106	<0.0002	<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
		18 Apr 2023	0021_SD073_230418	ES2313364	<0.0002	<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
		17 Oct 2023	0021_SD073_231017	ES2336399	<0.0002	<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
		09 Apr 2024	0021_SD073_240409	ES2411995	<0.0002	<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
		25 Oct 2024	0021_SD073_241025	ES2435541	<0.0002	<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
		04 Apr 2025	0021_QC110_250404	ES2510113	<0.0002	<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
			0021_QC210_250404	1210052	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
			0021_SD073_250404	ES2510622	<0.0002	<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

Statistics

Number of Results	17	18	17	17	17	17	17	17	17	17	17	17	18	18	18	18
Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	<0.0002	<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
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *	0.00024	0.00023	0.00039	0.00024	0.00024	0.00039	0.00039	0.00039	0.00039	0.00039	0.00039	0.00024	0.00038	0.00038	0.00051	0.00038
Geometric Average *	0.00012	0.00012	0.00029	0.00012	0.00012	0.00029	0.00013	0.00029	0.00029	0.00013	0.00029	0.00012	0.00028	0.00028	0.0003	0.00028
Median Concentration *	0.0001	0.0001	0.00025	0.0001	0.0001	0.00025	0.0001	0.00025	0.00025	0.0001	0.00025	0.0001	0.00025	0.00025	0.00025	0.00025
Standard Deviation *	0.00058	0.00057	0.00055	0.00058	0.00058	0.00055	0.0012	0.00055	0.00055	0.0012	0.00055	0.00058	0.00053	0.00053	0.0011	0.00053
Geometric Standard Deviation *	2.2	2.1	1.7	2.2	2.2	1.7	2.6	1.7	1.7	2.6	1.7	2.2	1.7	1.7	2	1.7
95% UCL (Student's-t) *	0.00048765	0.00046528	0.0006161	0.00048765	0.00048765	0.0006161	0.00089146	0.0006161	0.0006161	0.00089146	0.0006161	0.00048765	0.00059245	0.00059245	0.00097295	0.00059245
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.

Comments

#1 Reported Analyte LOR is higher than Requested Analyte LOR

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids						PFAS - Perfluoroal				
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)
					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	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	0.005	0.0001	0.005	0.0001	0.0002	0.0002	0.0002	0.0001	0.0001
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																			
Source	0021_SD001	20 Apr 2017	AB_SED01_0-0.05	ES1709644	0.224	0.0071	0.0006	0.231	0.239	0.233	-	-	<0.0002	0.0028	-	0.0007	-	0.0002	<0.001	0.0009	<0.0002	<0.0002	0.0008
Source	0021_SD001	19 Oct 2021	0021_SD001_211019	ES2138639	0.109	0.0133	0.0004	0.122	0.130	0.124	-	-	0.0004	0.0022	-	0.0012	-	0.0008	<0.001	0.0002	0.0005	<0.0002	0.0008
Source	0021_SD001	05 Apr 2022	0021_SD001_220405	ES2212442	0.0181	0.0013	<0.0002	0.0194	0.0204	0.0194	-	-	<0.0002	0.0007	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Source	0021_SD001	13 Oct 2022	0021_SD001_221013	ES2237106	0.0505	0.0069	0.0002	0.0574	0.0609	0.0582	-	-	0.0003	0.0008	-	0.0004	-	0.0005	<0.001	<0.0002	0.0003	<0.0002	0.0003
Source	0021_SD001	20 Apr 2023	0021_QC113_230420	ES2313364	0.0135	0.0014	<0.0002	0.0149	0.0154	0.0154	-	-	0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	0.0003
Source	0021_SD001	20 Apr 2023	0021_QC213_230420	321517	0.019	0.0020	0.0002	0.021	0.022	-	0.019	-	<0.0001	0.0003	-	0.0002	-	0.0001	<0.0002	<0.0005	<0.0005	<0.0001	0.0003
Source	0021_SD001	20 Apr 2023	0021_SD001_230420	ES2313364	0.0109	0.0024	<0.0002	0.0133	0.0140	0.0137	-	-	<0.0002	0.0003	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	0.0004
Source	0021_SD001	18 Oct 2023	0021_SD001_231018	ES2336399	0.0072	0.0008	<0.0002	0.0080	0.0080	0.0080	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Source	0021_SD001	10 Apr 2024	0021_SD001_240410	ES2411995	0.0178	0.0015	<0.0002	0.0193	0.0197	0.0193	-	-	<0.0002	0.0004	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Source	0021_SD001	24 Oct 2024	0021_SD001_241024	ES2435541	0.0528	0.0063	0.0003	0.0591	0.0626	0.0606	-	-	0.0004	0.0008	-	0.0005	-	0.0004	<0.001	<0.0002	0.0003	<0.0002	0.0008
Source	0021_SD001	29 Jan 2025	0021_QC101_250129	ES2503552	0.0274	0.0044	<0.0002	0.0318	0.0348	0.0326	-	-	0.0006	0.0009	-	0.0003	-	0.0004	<0.001	<0.0002	0.0003	<0.0002	0.0002
Source	0021_SD001	29 Jan 2025	0021_QC201_250129	1187025	0.018[#2]	<0.005	<0.005	0.018	<0.05	0.018	0.018	0.018	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Source	0021_SD001	29 Jan 2025	0021_SD001_250129	ES2503552	0.0335	0.0051	<0.0002	0.0386	0.0406	0.0388	-	-	0.0002	0.0006	-	0.0006	-	0.0003	<0.001	<0.0002	0.0003	<0.0002	<0.0002
Source	0021_SD001	03 Apr 2025	0021_SD001_250403	ES2510622	0.0498	0.0097	0.0002	0.0595	0.0647	0.0605	-	-	0.0002	0.0013	-	0.0006	-	0.0004	<0.001	<0.0002	<0.0002	<0.0002	0.0006
Source	0021_SD023	19 Apr 2017	FC_SED11_0.0-0.05	ES1709535	0.0121	0.0017	<0.0002	0.0138	0.014	0.014	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	0.0002
Source	0021_SD023	21 Oct 2021	0021_SD023_211021	ES2138639	0.0008	<0.0002	<0.0002	0.0008	0.0026	0.0026	-	-	0.0018	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Source	0021_SD023	06 Apr 2022	0021_SD023_220406	ES2212442	0.0072	0.0011	<0.0002	0.0083	0.0083	0.0083	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Source	0021_SD023	12 Oct 2022	0021_SD023_221012	ES2237106	0.0101	0.0281	<0.0002	0.0382	0.0512	0.0488	-	-	0.0020	<0.0002	-	<0.0002	-	0.0024	<0.001	<0.0002	<0.0002	0.0006	0.0065
Source	0021_SD023	20 Apr 2023	0021_SD023_230420	ES2313364	0.0029	0.0034	<0.0002	0.0063	0.0074	0.0071	-	-	<0.0002	<0.0002	-	<0.0002	-	0.0003	<0.001	<0.0002	<0.0002	<0.0002	0.0008
Source	0021_SD023	18 Oct 2023	0021_SD023_231018	ES2336399	0.0284	0.0061	<0.0002	0.0345	0.0367	0.0354	-	-	0.0005	0.0006	-	<0.0002	-	0.0004	<0.001	<0.0002	<0.0002	<0.0002	0.0004
Source	0021_SD023	10 Apr 2024	0021_SD023_240410	ES2411995	0.0290	0.0026	<0.0002	0.0316	0.0370	0.0319	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	0.0009	0.0010	<0.0002	0.0003
Source	0021_SD023	24 Oct 2024	0021_SD023_241024	ES2435541	0.0106	0.0037	<0.0002	0.0143	0.0155	0.0148	-	-	0.0003	0.0003	-	<0.0002	-	0.0002	<0.001	<0.0002	<0.0002	<0.0002	0.0002
Source	0021_SD023	01 Apr 2025	0021_SD023_250401	ES2510622	0.0074	0.0060	<0.0002	0.0134	0.0258	0.0255	-	-	<0.0002	<0.0002	-	<0.0002	-	0.0003	0.002	<0.0002	<0.0002	0.0004	0.0075
Pathway	0020_SD025	18 Apr 2017	CL_SED08_0-0.05	ES1709535	0.0005	<0.0002	<0.0002	0.0005	0.0005	0.0005	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Pathway	0020_SD025	18 Apr 2017	JCQA01	ES1709535	0.0008	0.0002	<0.0002	0.001	0.001	0.001	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Pathway	0020_SD025	01 May 2018	CL_SD08_0.0_180501	ES1812871	0.0016	0.0007	<0.0002	0.0023	0.0023	0.0023	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Pathway	0020_SD025	21 Oct 2021	0020_SD025_211021	ES2138638	0.0072	0.0007	<0.0002	0.0079	0.0110	0.0110	-	-	0.0026	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	0.0002
Pathway	0020_SD025	04 Apr 2022	0020_SD025_220404	ES2212597	0.0051	0.0006	<0.0002	0.0057	0.0060	0.0060	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	0.0003
Pathway	0020_SD025	10 Oct 2022	0020_SD025_221012	ES2236866	0.0030	0.0003	<0.0002	0.0033	0.0033	0.0033	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Pathway	0020_SD025	12 Oct 2022	0020_SD025_221012	ES2237104	0.0107	0.0017	0.0002	0.0124	0.0151	0.0149	-	-	<0.0002	0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	0.0011
Pathway	0020_SD025	01 Feb 2023	0020_SD025_230201	ES2303447	0.0024	0.0005	<0.0002	0.0029	0.0029	0.0029	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Pathway	0020_SD025	17 Apr 2023	0020_QC103_230417	ES2313254	0.0024	0.0004	<0.0002	0.0028	0.0028	0.0028	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Pathway	0020_SD025	17 Apr 2023	0020_QC203_230417	321518	0.0029	0.0005	<0.0001	0.0033	0.0033	-	0.0029	-	<0.0001	<0.0002	-	<0.0001	-	<0.0001	<0.0002	<0.0005	<0.0005	<0.0001	<0.0001
Pathway	0020_SD025	17 Apr 2023	0020_SD025_230417	ES2313254	0.0016	0.0003	<0.0002	0.0019	0.0019	0.0019	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Pathway	0020_SD025	16 Oct 2023	0020_SD025_231016	ES2336397	0.0034	0.0006	<0.0002	0.0040	0.0040	0.0040	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Pathway	0020_SD025	08 Apr 2024	0020_SD025_240408	ES2411964	0.0029	0.0005	<0.0002	0.0034	0.0048	0.0048	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	0.0008
Pathway	0020_SD025	23 Oct 2024	0020_SD025_241023	ES2435143	0.0029	0.0003	<0.0002	0.0032	0.0032	0.0032	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Pathway	0020_SD025	02 Apr 2025	0020_SD025_250402	ES2510618	0.0202	0.0076	<0.0002	0.0278	0.0293	0.0278	-	-	<0.0002	0.0007	-	0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Pathway	0021_SD009	18 Apr 2017	CL_SED09_0-0.05	ES1709535	0.0134	0.0027	0.0003	0.0161	0.0188	0.0186	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	0.001	<0.0002	<0.0002	<0.0002	0.0007
Pathway	0021_SD009	20 Oct 2021	0021_SD009_211020	ES2138639	0.0525	0.0050	0.0002	0.0575	0.0621	0.0591	-	-	0.0004	0.0013	-	0.0004	-	0.0002	<0.001	0.0002	0.0004	<0.0002	0.0006
Pathway	0021_SD009	10 Oct 2022	0021_SD009_221010	ES2237106	0.0265	0.0041	0.0003	0.0306	0.0329	0.0329	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	0.0010
Pathway	0021_SD009	17 Apr 2023	0021_SD009_230417	ES2313364	0.0315	0.0093	<0.0002	0.0408	0.0429	0.0413	-	-	0.0003	0.0005	-	0.0005	-	0.0006	<0.001	<0.0002	<0.0002	<0.0002	0.0002
Pathway	0021_SD009	16 Oct 2023	0021_SD009_231016	ES2336399	0.0661	0.0096	<0.0005[#1]	0.0757	0.0782	0.0764	-	-	0.0007	0.0012	-	0.0006	-	<0.0005[#1]	<0.002[#1]	<0.0005[#1]	<0.0005[#1]	<0.0005[#1]	<0.0005[#1]
Pathway	0021_SD009	10 Apr 2024	0021_SD009_240410	ES2411995	0.0182	0.0030	<0.0002	0.0212	0.0214	0.0212	-	-	<0.0002	0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Pathway	0021_SD009	22 Oct 2024	0021_SD009_241022	ES2435078	0.0740	0.0214	<0.0025[#1]	0.0954	0.100	0.100	-	-	0.0046	<0.0025[#1]	-	<0.0025[#1]	-	<0.0025[#1]	<0.012[#1]	<0.0025[#1]	<0.0025[#1]	<0.0025[#1]	<0.0025[#1]
Pathway	0021_SD009	01 Apr 2025	0021_SD009_250401	ES2510622	0.0093	0.0022	<0.0002	0.0115	0.0115	0.0115	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Pathway	0021_SD011	20 Apr 2017	CL_SED11_0-0.05	ES1709644	0.0027	<0.0002	<0.0002	0.0027	0.0027	0.0027	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Pathway	0021_SD011	20 Apr 2017	JCQA05	ES1709644	0.0020	<0.0002	<0.0002	0.0020	0.0020	0.0020	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Pathway	0021_SD011	26 Oct 2024	0021_SD011_241026	ES2435541	0.0029	0.0007	<0.0002	0.0036	0.0036	0.0036	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Pathway	0021_SD011	01 Apr 2025	0021_SD011_250401	ES2510622	0.0010	0.0004	<0.0002	0.0014	0.0014	0.0014	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Pathway	0021_SD015	20 Apr 2017	DC_SED04_0-0.05	ES1709644	0.0168	0.0045	0.0007	0.0213	0.0239	0.0234	-	-	<0.0002	<0.0002	-	0.0005	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	0.0014
Pathway	0021_SD015	19 Oct 2021	0021_SD015_211019	ES2138639	0.0175	0.0023	<0.0002	0.0198	0.0200	0.0200	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	0.0002
Pathway	0021_SD015	05 Apr 2022	0021_SD015_220405	ES2212442	0.0115	0.0051	<0.0002	0.0166	0.0175	0.0169	-	-	<0.0002	<0.0002	-	0.0003	-	0.0003	<0.001	<0.0002	<0.0002	<0.0002	0.0003
Pathway	0021_SD015	13 Oct 2022	0021_SD015_221013	ES2237106	0.0396	0.0096	0.0003	0.0492	0.0515	0.0502	-	-	0.0003	<0.0002	-	0.0008	-	0.0005	<0.001	<0.0002	<0.0002	<0.0002	0.0004
Pathway	0021_SD015	20 Apr 2023	0021_QC115_230420	ES2313364	0.0377	0.0086	0.0003	0.0463	0.0487	0.0474	-	-	0.0004	<0.0002	-	0.0007	-	0.0006	<0.001	<0.0002	<0.0002	<0.0002	0.0004
Pathway	0021_SD015	20 Apr 2023	0021_QC215_230420	321517	0.047	0.016	0.0005	0.063	0.067	-	0.048	-	0.0004	<0.0002	-	0.0012	-	0.0009	<0.0002	<0.0005	<0.0005	<0.0001	0.0006
Pathway	0021_SD015	20 Apr 2023	0021_SD015_230420	ES2313364	0.0608	0.0153	0.0005	0.0761	0.0815	0.0782	-	-	0.0007	0.0003	-	0.0017	-	0.0013	<0.001	<0.0002	<0.0002	<0.0002	0.0009
Pathway	0021_SD015	18 Oct 2023	0021_SD015_231018	ES2336399	0.0550	0.0098	0.0005	0.0648	0.0683	0.0663	-	-	0.0004	0.0006	-	0.0008	-	0.0006	<0.001	<0.0002	<0.0002	<0.0002	0.0006
Pathway	0021_SD015	11 Apr 2024	0021_SD015_240411	ES2411995	0.0201	0.0021	<0.0002	0.0222	0.0224	0.0222	-	-	<0.0002	<0.0002	-	0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Pathway	0021_SD015	24 Oct 2024	0021_SD015_241024	ES2435541	0.0710	0.0142	0.0004	0.0852	0.0888	0.0866	-	-	0.0006	<0.0002	-	0.0013	-	0.0009	<0.001	<0.0002	<0.0002	<0.0002	0.0004
Pathway	0021_SD015	03 Apr 2025	0021_QC139_250403	ES2510113	0.0250	0.0054	<0.0002	0.0304	0.0314	0.0306	-	-	0.0002	<0.0002	-	0.0004	-	0.0004	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Pathway	0021_SD015	03 Apr 2025	0021_QC239_250403	1210052	0.017[#2]	<0.005[#2]	<0.005	0.017	<0.05	0.017	0.017	0.017	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Pathway	0021_SD015	03 Apr 2025	0021_SD015_250403	ES2510622	0.0307	0.0088	0.0002	0.0395	0.0422	0.0407	-	-	0.0006	<0.0002	-	0.0006	-	0.0006	<0.001	<0.0002	<0.0002	<0.0002	0.0004

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids						PFAS - Perfluoroal				
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)
					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	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	0.005	0.0001	0.005	0.0001	0.0002	0.0002	0.0002	0.0001	0.0001
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																			
Pathway	0021_SD017	13 Apr 2017	DC_SED06_0-0.1	ES1709064	0.0493	0.0059	0.0006	0.0552	0.0581	0.0567	-	-	<0.0002	<0.0002	-	0.0006	-	<0.0002	<0.001	0.0003	<0.0002	0.0002	0.0007
Pathway	0021_SD017	20 Oct 2021	0021_SD017_211020	ES2138639	0.0225	0.0046	0.0003	0.0271	0.0310	0.0284	-	-	0.0002	0.0007	-	0.0002	-	0.0002	<0.001	0.0003	0.0004	<0.0002	0.0008
Pathway	0021_SD017	06 Apr 2022	0021_SD017_220406	ES2212442	0.0033	0.0028	<0.0002	0.0061	0.0067	0.0065	-	-	<0.0002	<0.0002	-	0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	0.0004
Pathway	0021_SD017	14 Oct 2022	0021_SD017_221014	ES2237106	0.0222	0.0015	<0.0002	0.0237	0.0241	0.0239	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	0.0002
Pathway	0021_SD017	21 Apr 2023	0021_SD017_230421	ES2313364	0.0353	0.0037	0.0006	0.0390	0.0423	0.0402	-	-	<0.0002	0.0006	-	0.0004	-	<0.0002	<0.001	0.0004	<0.0002	<0.0002	0.0006
Pathway	0021_SD017	19 Oct 2023	0021_SD017_231019	ES2336399	<0.0002	0.0278	0.0002	0.0278	0.0342	0.0330	-	-	0.0011	<0.0002	-	<0.0002	-	0.0012	<0.001	<0.0002	<0.0002	0.0006	0.0026
Pathway	0021_SD017	12 Apr 2024	0021_SD017_240412	ES2411995	0.0004	0.0034	0.0004	0.0038	0.0042	0.0042	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Pathway	0021_SD017	22 Oct 2024	0021_SD017_241022	ES2435078	0.0212	0.0015	<0.0002	0.0227	0.0247	0.0229	-	-	<0.0002	0.0008	-	<0.0002	-	<0.0002	<0.001	0.0002	0.0003	<0.0002	0.0002
Pathway	0021_SD017	02 Apr 2025	0021_SD017_250402	ES2510622	0.0845	0.0112	0.0009	0.0957	0.108	0.0990	-	-	0.0002	0.0024	-	0.0014	-	0.0004	<0.001	0.0008	0.0009	0.0003	0.0014
Receptor	0020_SD018	18 Apr 2017	CL_SED01_0-0.05	ES1709535	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
Receptor	0020_SD018	01 May 2018	CL_SD01_0.0_180501	ES1812871	0.0018	<0.0002	<0.0002	0.0018	0.0018	0.0018	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Receptor	0020_SD018	18 Oct 2021	0020_SD018_211018	ES2138638	0.0009	0.0003	<0.0002	0.0012	0.0012	0.0012	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Receptor	0020_SD018	04 Apr 2022	0020_SD018_220404	ES2212597	<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
Receptor	0020_SD018	11 Oct 2022	0020_QC203_221011	308190	0.0002	<0.0001	<0.0001	0.0002	0.0002	-	0.0002	-	<0.0001	<0.0002	-	<0.0001	-	<0.0001	<0.0002	<0.0005	<0.0005	<0.0001	<0.0001
Receptor	0020_SD018	11 Oct 2022	0020_SD018_221011	ES2237104	0.0003	<0.0002	<0.0002	0.0003	0.0003	0.0003	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Receptor	0020_SD018	17 Apr 2023	0020_SD018_230417	ES2313254	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	<0.0002
Receptor	0020_SD018	16 Oct 2023	0020_QC102_ 231016	ES2336397	0.0008	<0.0002	<0.0002	0.0008	0.0008	0.0008	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Receptor	0020_SD018	16 Oct 2023	0020_QC202_231016	335710	0.0007	<0.0001	<0.0001	0.0007	0.0007	-	0.0007	-	<0.0001	<0.0002	-	<0.0001	-	<0.0001	<0.0002	<0.0005	<0.0005	<0.0001	<0.0001
Receptor	0020_SD018	16 Oct 2023	0020_SD018_ 231016	ES2336397	0.0005	<0.0002	<0.0002	0.0005	0.0005	0.0005	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Receptor	0020_SD018	08 Apr 2024	0020_SD018_240408	ES2411964	<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
Receptor	0020_SD018	25 Oct 2024	0020_SD018_241025	ES2435539	0.0025	<0.0002	<0.0002	0.0025	0.0025	0.0025	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Receptor	0020_SD018	31 Mar 2025	0020_SD018_250331	ES2510618	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
Receptor	0020_SD019	18 Apr 2017	CL_SED02_0-0.05	ES1709535	0.0024	<0.0002	<0.0002	0.0024	0.0024	0.0024	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Receptor	0020_SD019	01 May 2018	CL_SD02_0.0_180501	ES1812871	0.0024	0.0004	<0.0002	0.0028	0.0028	0.0028	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Receptor	0020_SD019	18 Oct 2021	0020_QC201_211018	281319	0.011	0.0004	<0.0001	0.011	0.011	-	0.011	-	<0.0001	<0.0002	-	<0.0001	-	<0.0001	<0.0002	<0.0005	<0.0005	<0.0001	<0.0001
Receptor	0020_SD019	18 Oct 2021	0020_SD019_211018	ES2138638	0.0096	0.0003	<0.0002	0.0099	0.0099	0.0099	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Receptor	0020_SD019	04 Apr 2022	0020_SD019_220404	ES2212597	0.0079	0.0006	<0.0002	0.0085	0.0085	0.0085	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Receptor	0020_SD019	11 Oct 2022	0020_SD019_221011	ES2237104	0.0560	0.0017	0.0007	0.0577	0.0648	0.0610	-	-	<0.0002	0.0004	-	0.0003	-	<0.0002	<0.001	<0.0002	0.0007	<0.0002	0.0010
Receptor	0020_SD019	17 Apr 2023	0020_SD019_230417	ES2313254	0.0176	0.0019	0.0002	0.0195	0.0202	0.0197	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Receptor	0020_SD019	16 Oct 2023	0020_SD019_ 231016	ES2336397	0.430	0.0228	<0.0010[#1]	0.453	0.459	0.454	-	-	<0.0010[#1]	<0.0010[#1]	-	0.0020	-	0.0011	<0.005[#1]	<0.0010[#1]	<0.0010[#1]	<0.0010[#1]	0.0016
Receptor	0020_SD019	08 Apr 2024	0020_QC103_240408	ES2411964	0.0094	0.0007	<0.0002	0.0101	0.0108	0.0101	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	0.0003	<0.0002	<0.0002
Receptor	0020_SD019	08 Apr 2024	0020_QC203_240408	348827	0.01	0.0005	0.0001	0.011	0.011	-	0.01	-	<0.0001	<0.0002	-	<0.0001	-	<0.0001	<0.0002	<0.0005	<0.0005	<0.0001	0.0001
Receptor	0020_SD019	08 Apr 2024	0020_SD019_240408	ES2411964	0.0116	0.0007	<0.0002	0.0123	0.0137	0.0123	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	0.0002	0.0004	<0.0002	<0.0002
Receptor	0020_SD019	25 Oct 2024	0020_SD019_241025	ES2435539	0.0017	<0.0002	<0.0002	0.0017	0.0019	0.0017	-	-	<0.0002	<0.0002	-	0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Receptor	0020_SD019	31 Mar 2025	0020_SD019_250331	ES2510618	0.0012	<0.0002	<0.0002	0.0012	0.0012	0.0012	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Receptor	0020_SD024	18 Apr 2017	CL_SED07_0-0.05	ES1709535	0.0127	0.0018	<0.0002	0.0145	0.0145	0.0145	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Receptor	0020_SD024	01 May 2018	CL_QC220_180501	597346	<0.005	<0.005	<0.005	<0.005	<0.05	<0.01	-	-	<0.005	<0.005	-	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Receptor	0020_SD024	01 May 2018	CL_SD07_0.0_180501	ES1812871	<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
Receptor	0020_SD024	18 Oct 2021	0020_SD024_211018	ES2138638	0.0008	<0.0002	<0.0002	0.0008	0.0008	0.0008	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Receptor	0020_SD024	04 Apr 2022	0020_SD024_220404	ES2212597	0.0003	<0.0002	<0.0002	0.0003	0.0003	0.0003	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Receptor	0020_SD024	10 Oct 2022	0020_SD024_221012	ES2236866	<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
Receptor	0020_SD024	12 Oct 2022	0020_SD024_221012	ES2237104	0.0003	<0.0002	<0.0002	0.0003	0.0003	0.0003	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Receptor	0020_SD024	30 Jan 2023	0020_QC140_230130	ES2303447	0.0005	<0.0002	<0.0002	0.0005	0.0005	0.0005	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Receptor	0020_SD024	30 Jan 2023	0020_SD024_230130	ES2303447	0.0011	<0.0002	<0.0002	0.0011	0.0011	0.0011	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Receptor	0020_SD024	17 Apr 2023	0020_SD024_230417	ES2313254	0.0012	<0.0002	<0.0002	0.0012	0.0012	0.0012	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Receptor	0020_SD024	16 Oct 2023	0020_SD024_ 231016	ES2336397	0.0005	<0.0002	<0.0002	0.0005	0.0005	0.0005	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Receptor	0020_SD024	08 Apr 2024	0020_SD024_240408	ES2411964	0.0016	<0.0002	<0.0002	0.0016	0.0016	0.0016	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Receptor	0020_SD024	25 Oct 2024	0020_QC111_241025	ES2435539	0.0109	0.0009	<0.0002	0.0118	0.0145	0.0131	-	-	<0.0002	0.0008	-	0.0006	-	<0.0002	<0.001	<0.0002	<0.0002	0.0002	<0.0002
Receptor	0020_SD024	25 Oct 2024	0020_QC211_241025	1156671	<0.005	<0.005	<0.005	<0.005	<0.05	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Receptor	0020_SD024	25 Oct 2024	0020_SD024_241025	ES2435539	0.0144	0.0014	<0.0002	0.0158	0.0178	0.0158	-	-	<0.0002	0.0009	-	0.0008	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Receptor	0020_SD024	31 Mar 2025	0020_SD024_250331	ES2510618	0.0008	<0.0002	<0.0002	0.0008	0.0008	0.0008	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002
Receptor	0020_SD026	26 Mar 2018	CL_QC208_180326	592055	<0.005	<0.005	<0.005	<0.005	<0.05	<0.01	-	-	<0.005	<0.005	-	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Receptor	0020_SD026	26 Mar 2018	CL_SD12_0.0_180326	ES1809241	<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
Receptor	0020_SD026	15 May 2018	CL_SD12_0.0_180515	ES1814324	<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
Receptor	0020_SD026	18 Oct 2021	0020_SD026_211018	ES2138638	<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
Receptor	0020_SD026	04 Apr 2022	0020_SD026_220404	ES2212597	<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
Receptor	0020_SD026	11 Oct 2022	0020_SD026_221011	ES2237104	<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
Receptor	0020_SD026	17 Apr 2023	0020_SD026_230417	ES2313254	<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
Receptor	0020_SD026	16 Oct 2023	0020_SD026_ 231016	ES2336397	<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
Receptor	0020_SD026	08 Apr 2024	0020_QC102_240408	ES2411964	<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
Receptor	0020_SD026	08 Apr 2024	0020_QC202_240408	348827	0.0003	<0.0001	<0.0001	0.0003	0.0003	-	0.0003	-	<0.0001	<0.0002	-	<0.0001	-	<0.0001	<0.0002	<0.0005	<0.0005	<0.0001	<0.0001
Receptor	0020_SD026	08 Apr 2024	0020_SD026_240408	ES2411964	<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
Receptor	0020_SD026	25 Oct 2024	0020_SD026_241025	ES2435539	<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
Receptor	0020_SD026	31 Mar 2025	0020_QC101_250331	ES2510618	<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
Receptor	0020_SD026	31 Mar 2025	0020_QC201_250331	1209674	<0.005	<0.005	<0.005	<0.005	<0.05	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Receptor	0020_SD026	31 Mar 2025	0020_SD026_250331	ES2510618	<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

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids						PFAS - Perfluoroal				
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)
	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	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	0.005	0.0001	0.005	0.0001	0.0002	0.0002	0.0002	0.0001	0.0001
Statistics																			
Number of Results	129	129	129	129	129	121	12	4	129	129	4	129	4	129	129	129	129	129	129
Number of Detects	108	80	27	109	107	101	10	2	27	28	0	34	0	28	2	10	13	6	45
Minimum Concentration	0.0002	<0.0001	0.0001	0.0002	0.0002	0.0002	0.0002	<0.005	<0.0001	0.0002	<0.005	<0.0001	<0.005	0.0001	<0.0002	0.0002	<0.0002	<0.0001	0.0001
Minimum Detect	0.0002	0.0002	0.0001	0.0002	0.0002	0.0002	0.0002	0.017	0.0002	0.0002	ND	0.0002	ND	0.0001	0.001	0.0002	0.0003	0.0002	0.0001
Maximum Concentration	0.43	0.0281	<0.005	0.453	0.459	0.454	0.048	0.018	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.012	<0.005	<0.005	<0.005	0.0075
Maximum Detect	0.43	0.0281	0.0009	0.453	0.459	0.454	0.048	0.018	0.0046	0.0028	ND	0.002	ND	0.0024	0.002	0.0009	0.001	0.0006	0.0075
Average Concentration *	0.019	0.0031	0.00028	0.022	0.024	0.023	0.011	0.01	0.00035	0.00038	0.0025	0.00036	0.0025	0.00033	0.00065	0.00026	0.00027	0.00023	0.0005
Geometric Average *	0.0037	0.00081	0.00015	0.0044	0.005	0.0047	0.0041	0.0066	0.00016	0.00018	0.0025	0.00018	0.0025	0.00016	0.00051	0.00014	0.00015	0.00012	0.00021
Median Concentration *	0.0034	0.0007	0.0001	0.0063	0.0099	0.0071	0.00645	0.00975	0.0001	0.0001	0.0025	0.0001	0.0025	0.0001	0.0005	0.0001	0.0001	0.0001	0.0001
Standard Deviation *	0.046	0.0053	0.00052	0.049	0.05	0.05	0.014	0.0087	0.0007	0.00064	0	0.00058	0	0.00057	0.00068	0.00052	0.00052	0.00052	0.001
Geometric Standard Deviation *	8.5	6.2	2.4	8.8	9.2	9	5.8	3.1	2.7	2.8	1	2.8	1	2.7	1.8	2.2	2.3	2.2	3.1
95% UCL (Student's-t) *	0.0257	0.00391	0.00035806	0.0291	0.0315	0.0309	0.0181	0.0202	0.00045313	0.0004783	0.0025	0.0004445	0.0025	0.00040927	0.00074523	0.00033664	0.00034753	0.00031049	0.00064704
Number of Env Standard Exceedances	109	85	7	106	74	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Env Standard Exceedances (Detects Only)	105	79	0	106	68	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Detects	84	62	21	84	83	83	83	50	21	22	0	26	0	22	2	8	10	5	35
% of Non-Detects	16	38	79	16	17	17	17	50	79	78	100	74	100	78	98	92	90	95	65
% of Detects at or above Env Standards	81	61	0	82	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Results Below Env Standards or Non-Detect	19	39	100	18	47	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.

					kyl Carboxylic Acids					PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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					0.0001	0.0002	0.0005	0.0002	0.0002	0.0005	0.0002	0.0005	0.0005	0.0002	0.0005	0.0002	0.0002	0.0001	0.0001	0.0002
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																
Source	0021_SD001	20 Apr 2017	AB_SED01_0-0.05	ES1709644	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0009	<0.0005	<0.0005	<0.0005	0.0007
Source	0021_SD001	19 Oct 2021	0021_SD001_211019	ES2138639	<0.0002	<0.0002	<0.0005	<0.0002	0.0003	<0.0005	<0.0002	0.0005	<0.0005	<0.0002	<0.0005	0.0007	<0.0005	<0.0005	<0.0005	<0.0005
Source	0021_SD001	05 Apr 2022	0021_SD001_220405	ES2212442	<0.0002	<0.0002	<0.0005	<0.0002	0.0003	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Source	0021_SD001	13 Oct 2022	0021_SD001_221013	ES2237106	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0007	<0.0005	<0.0005	<0.0005	<0.0005
Source	0021_SD001	20 Apr 2023	0021_QC113_230420	ES2313364	<0.0002	<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
Source	0021_SD001	20 Apr 2023	0021_QC213_230420	321517	<0.0001	<0.0002	<0.005	<0.0005	<0.0005	<0.001	<0.0002	<0.005	<0.001	<0.0002	<0.001	<0.001	<0.0002	<0.0001	<0.0001	<0.0002
Source	0021_SD001	20 Apr 2023	0021_SD001_230420	ES2313364	<0.0002	<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
Source	0021_SD001	18 Oct 2023	0021_SD001_231018	ES2336399	<0.0002	<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
Source	0021_SD001	10 Apr 2024	0021_SD001_240410	ES2411995	<0.0002	<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
Source	0021_SD001	24 Oct 2024	0021_SD001_241024	ES2435541	<0.0002	<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
Source	0021_SD001	29 Jan 2025	0021_QC101_250129	ES2503552	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0003	<0.0005	<0.0005	<0.0005	<0.0005
Source	0021_SD001	29 Jan 2025	0021_QC201_250129	1187025	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
Source	0021_SD001	29 Jan 2025	0021_SD001_250129	ES2503552	<0.0002	<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
Source	0021_SD001	03 Apr 2025	0021_SD001_250403	ES2510622	<0.0002	<0.0002	<0.0005	<0.0002	0.0004	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Source	0021_SD023	19 Apr 2017	FC_SED11_0.0-0.05	ES1709535	<0.0002	<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
Source	0021_SD023	21 Oct 2021	0021_SD023_211021	ES2138639	<0.0002	<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
Source	0021_SD023	06 Apr 2022	0021_SD023_220406	ES2212442	<0.0002	<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
Source	0021_SD023	12 Oct 2022	0021_SD023_221012	ES2237106	<0.0002	0.0015	<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
Source	0021_SD023	20 Apr 2023	0021_SD023_230420	ES2313364	<0.0002	<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
Source	0021_SD023	18 Oct 2023	0021_SD023_231018	ES2336399	<0.0002	<0.0002	<0.0005	<0.0002	0.0003	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Source	0021_SD023	10 Apr 2024	0021_SD023_240410	ES2411995	<0.0002	<0.0002	<0.0005	0.0002	0.0010	<0.0005	<0.0002	0.0020	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Source	0021_SD023	24 Oct 2024	0021_SD023_241024	ES2435541	<0.0002	<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
Source	0021_SD023	01 Apr 2025	0021_SD023_250401	ES2510622	<0.0002	0.0022	<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
Pathway	0020_SD025	18 Apr 2017	CL_SED08_0-0.05	ES1709535	<0.0002	<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
Pathway	0020_SD025	18 Apr 2017	JCQA01	ES1709535	<0.0002	<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
Pathway	0020_SD025	01 May 2018	CL_SD08_0.0_180501	ES1812871	<0.0002	<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
Pathway	0020_SD025	21 Oct 2021	0020_SD025_211021	ES2138638	<0.0002	0.0003	<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
Pathway	0020_SD025	04 Apr 2022	0020_SD025_220404	ES2212597	<0.0002	<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
Pathway	0020_SD025	10 Oct 2022	0020_SD025_221012	ES2236866	<0.0002	<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
Pathway	0020_SD025	12 Oct 2022	0020_SD025_221012	ES2237104	<0.0002	0.0012	<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
Pathway	0020_SD025	01 Feb 2023	0020_SD025_230201	ES2303447	<0.0002	<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
Pathway	0020_SD025	17 Apr 2023	0020_QC103_230417	ES2313254	<0.0002	<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
Pathway	0020_SD025	17 Apr 2023	0020_QC203_230417	321518	<0.0001	<0.0002	<0.005	<0.0005	<0.0005	<0.001	<0.0002	<0.005	<0.001	<0.0002	<0.001	<0.001	<0.0002	<0.0001	<0.0001	<0.0002
Pathway	0020_SD025	17 Apr 2023	0020_SD025_230417	ES2313254	<0.0002	<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
Pathway	0020_SD025	16 Oct 2023	0020_SD025_231016	ES2336397	<0.0002	<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
Pathway	0020_SD025	08 Apr 2024	0020_SD025_240408	ES2411964	<0.0002	0.0006	<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
Pathway	0020_SD025	23 Oct 2024	0020_SD025_241023	ES2435143	<0.0002	<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
Pathway	0020_SD025	02 Apr 2025	0020_SD025_250402	ES2510618	<0.0002	<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
Pathway	0021_SD009	18 Apr 2017	CL_SED09_0-0.05	ES1709535	<0.0002	0.0005	<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
Pathway	0021_SD009	20 Oct 2021	0021_SD009_211020	ES2138639	<0.0002	0.0004	<0.0005	<0.0002	0.0005	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Pathway	0021_SD009	10 Oct 2022	0021_SD009_221010	ES2237106	<0.0002	0.0010	<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
Pathway	0021_SD009	17 Apr 2023	0021_SD009_230417	ES2313364	<0.0002	<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
Pathway	0021_SD009	16 Oct 2023	0021_SD009_231016	ES2336399	<0.0005[#1]	<0.0005[#1]	<0.0012[#1]	<0.0005[#1]	<0.0005[#1]	<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
Pathway	0021_SD009	10 Apr 2024	0021_SD009_240410	ES2411995	<0.0002	<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
Pathway	0021_SD009	22 Oct 2024	0021_SD009_241022	ES2435078	<0.0025[#1]	<0.0025[#1]	<0.0062[#1]	<0.0025[#1]	<0.0025[#1]	<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]
Pathway	0021_SD009	01 Apr 2025	0021_SD009_250401	ES2510622	<0.0002	<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
Pathway	0021_SD011	20 Apr 2017	CL_SED11_0-0.05	ES1709644	<0.0002	<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
Pathway	0021_SD011	20 Apr 2017	JCQA05	ES1709644	<0.0002	<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
Pathway	0021_SD011	26 Oct 2024	0021_SD011_241026	ES2435541	<0.0002	<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
Pathway	0021_SD011	01 Apr 2025	0021_SD011_250401	ES2510622	<0.0002	<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
Pathway	0021_SD015	20 Apr 2017	DC_SED04_0-0.05	ES1709644	<0.0002	<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
Pathway	0021_SD015	19 Oct 2021	0021_SD015_211019	ES2138639	<0.0002	<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
Pathway	0021_SD015	05 Apr 2022	0021_SD015_220405	ES2212442	<0.0002	<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
Pathway	0021_SD015	13 Oct 2022	0021_SD015_221013	ES2237106	<0.0002	<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
Pathway	0021_SD015	20 Apr 2023	0021_QC115_230420	ES2313364	<0.0002	<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
Pathway	0021_SD015	20 Apr 2023	0021_QC215_230420	321517	<0.0001	<0.0002	<0.005	<0.0005	<0.0005	<0.001	<0.0002	<0.005	<0.001	<0.0002	<0.001	<0.001	<0.0002	<0.0001	<0.0001	<0.0002
Pathway	0021_SD015	20 Apr 2023	0021_SD015_230420	ES2313364	<0.0002	<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
Pathway	0021_SD015	18 Oct 2023	0021_SD015_231018	ES2336399	<0.0002	<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
Pathway	0021_SD015	11 Apr 2024	0021_SD015_240411	ES2411995	<0.0002	<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
Pathway	0021_SD015	24 Oct 2024	0021_SD015_241024	ES2435541	<0.0002	<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
Pathway	0021_SD015	03 Apr 2025	0021_QC139_250403	ES2510113	<0.0002	<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
Pathway	0021_SD015	03 Apr 2025	0021_QC239_250403	1210052	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
Pathway	0021_SD015	03 Apr 2025	0021_SD015_250403	ES2510622	<0.0002	<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

					kyl Carboxylic Acids					PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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					0.0001	0.0002	0.0005	0.0002	0.0002	0.0005	0.0002	0.0005	0.0005	0.0002	0.0005	0.0002	0.0002	0.0001	0.0001	0.0002
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																
Pathway	0021_SD017	13 Apr 2017	DC_SED06_0-0.1	ES1709064	<0.0002	<0.0002	<0.0005	<0.0002	0.0005	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Pathway	0021_SD017	20 Oct 2021	0021_SD017_211020	ES2138639	<0.0002	<0.0002	<0.0005	<0.0002	0.0008	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Pathway	0021_SD017	06 Apr 2022	0021_SD017_220406	ES2212442	<0.0002	<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
Pathway	0021_SD017	14 Oct 2022	0021_SD017_221014	ES2237106	<0.0002	<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
Pathway	0021_SD017	21 Apr 2023	0021_SD017_230421	ES2313364	0.0003	<0.0002	<0.0005	<0.0002	0.0004	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Pathway	0021_SD017	19 Oct 2023	0021_SD017_231019	ES2336399	<0.0002	0.0007	<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
Pathway	0021_SD017	12 Apr 2024	0021_SD017_240412	ES2411995	<0.0002	<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
Pathway	0021_SD017	22 Oct 2024	0021_SD017_241022	ES2435078	<0.0002	<0.0002	<0.0005	<0.0002	0.0005	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Pathway	0021_SD017	02 Apr 2025	0021_SD017_250402	ES2510622	0.0003	0.0005	<0.0005	0.0002	0.0015	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Receptor	0020_SD018	18 Apr 2017	CL_SED01_0-0.05	ES1709535	<0.0002	<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
Receptor	0020_SD018	01 May 2018	CL_SD01_0.0_180501	ES1812871	<0.0002	<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
Receptor	0020_SD018	18 Oct 2021	0020_SD018_211018	ES2138638	<0.0002	<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
Receptor	0020_SD018	04 Apr 2022	0020_SD018_220404	ES2212597	<0.0002	<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
Receptor	0020_SD018	11 Oct 2022	0020_QC203_221011	308190	<0.0001	<0.0002	<0.005	<0.0005	<0.0005	<0.001	<0.0002	<0.005	<0.001	<0.0002	<0.001	<0.001	<0.0002	<0.0001	<0.0001	<0.0002
Receptor	0020_SD018	11 Oct 2022	0020_SD018_221011	ES2237104	<0.0002	<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
Receptor	0020_SD018	17 Apr 2023	0020_SD018_230417	ES2313254	<0.0002	<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
Receptor	0020_SD018	16 Oct 2023	0020_QC102_ 231016	ES2336397	<0.0002	<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
Receptor	0020_SD018	16 Oct 2023	0020_QC202_231016	335710	<0.0001	<0.0002	<0.005	<0.0005	<0.0005	<0.001	<0.0002	<0.005	<0.001	<0.0002	<0.001	<0.001	<0.0002	<0.0001	<0.0001	<0.0002
Receptor	0020_SD018	16 Oct 2023	0020_SD018_ 231016	ES2336397	<0.0002	<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
Receptor	0020_SD018	08 Apr 2024	0020_SD018_240408	ES2411964	<0.0002	<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
Receptor	0020_SD018	25 Oct 2024	0020_SD018_241025	ES2435539	<0.0002	<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
Receptor	0020_SD018	31 Mar 2025	0020_SD018_250331	ES2510618	<0.0002	<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
Receptor	0020_SD019	18 Apr 2017	CL_SED02_0-0.05	ES1709535	<0.0002	<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
Receptor	0020_SD019	01 May 2018	CL_SD02_0.0_180501	ES1812871	<0.0002	<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
Receptor	0020_SD019	18 Oct 2021	0020_QC201_211018	281319	<0.0001	<0.0002	<0.005	<0.0005	<0.0005	<0.001	<0.0002	<0.005	<0.001	<0.0002	<0.001	<0.001	<0.0002	<0.0001	<0.0001	<0.0002
Receptor	0020_SD019	18 Oct 2021	0020_SD019_211018	ES2138638	<0.0002	<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
Receptor	0020_SD019	04 Apr 2022	0020_SD019_220404	ES2212597	<0.0002	<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
Receptor	0020_SD019	11 Oct 2022	0020_SD019_221011	ES2237104	<0.0002	0.0016	<0.0005	0.0002	0.0015	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0007	<0.0005	<0.0005	<0.0005	<0.0005
Receptor	0020_SD019	17 Apr 2023	0020_SD019_230417	ES2313254	<0.0002	<0.0002	<0.0005	<0.0002	0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0003	<0.0005	<0.0005	<0.0005	<0.0005
Receptor	0020_SD019	16 Oct 2023	0020_SD019_ 231016	ES2336397	<0.0010[#1]	<0.0010[#1]	<0.0025[#1]	<0.0010[#1]	<0.0010[#1]	<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]
Receptor	0020_SD019	08 Apr 2024	0020_QC103_240408	ES2411964	<0.0002	<0.0002	<0.0005	<0.0002	0.0004	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Receptor	0020_SD019	08 Apr 2024	0020_QC203_240408	348827	<0.0001	<0.0002	<0.005	<0.0005	<0.0005	<0.001	<0.0002	<0.005	<0.001	<0.0002	<0.001	<0.001	<0.0002	<0.0001	<0.0001	<0.0002
Receptor	0020_SD019	08 Apr 2024	0020_SD019_240408	ES2411964	<0.0002	<0.0002	<0.0005	0.0002	0.0006	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Receptor	0020_SD019	25 Oct 2024	0020_SD019_241025	ES2435539	<0.0002	<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
Receptor	0020_SD019	31 Mar 2025	0020_SD019_250331	ES2510618	<0.0002	<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
Receptor	0020_SD024	18 Apr 2017	CL_SED07_0-0.05	ES1709535	<0.0002	<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
Receptor	0020_SD024	01 May 2018	CL_QC220_180501	597346	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
Receptor	0020_SD024	01 May 2018	CL_SD07_0.0_180501	ES1812871	<0.0002	<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
Receptor	0020_SD024	18 Oct 2021	0020_SD024_211018	ES2138638	<0.0002	<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
Receptor	0020_SD024	04 Apr 2022	0020_SD024_220404	ES2212597	<0.0002	<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
Receptor	0020_SD024	10 Oct 2022	0020_SD024_221012	ES2236866	<0.0002	<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
Receptor	0020_SD024	12 Oct 2022	0020_SD024_221012	ES2237104	<0.0002	<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
Receptor	0020_SD024	30 Jan 2023	0020_QC140_230130	ES2303447	<0.0002	<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
Receptor	0020_SD024	30 Jan 2023	0020_SD024_230130	ES2303447	<0.0002	<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
Receptor	0020_SD024	17 Apr 2023	0020_SD024_230417	ES2313254	<0.0002	<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
Receptor	0020_SD024	16 Oct 2023	0020_SD024_ 231016	ES2336397	<0.0002	<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
Receptor	0020_SD024	08 Apr 2024	0020_SD024_240408	ES2411964	<0.0002	<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
Receptor	0020_SD024	25 Oct 2024	0020_QC111_241025	ES2435539	<0.0002	<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	0.0011	<0.0005
Receptor	0020_SD024	25 Oct 2024	0020_QC211_241025	1156671	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
Receptor	0020_SD024	25 Oct 2024	0020_SD024_241025	ES2435539	<0.0002	<0.0002	<0.0006[#1]	<0.0002	0.0003	<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
Receptor	0020_SD024	31 Mar 2025	0020_SD024_250331	ES2510618	<0.0002	<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
Receptor	0020_SD026	26 Mar 2018	CL_QC208_180326	592055	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
Receptor	0020_SD026	26 Mar 2018	CL_SD12_0.0_180326	ES1809241	<0.0002	<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
Receptor	0020_SD026	15 May 2018	CL_SD12_0.0_180515	ES1814324	<0.0002	<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
Receptor	0020_SD026	18 Oct 2021	0020_SD026_211018	ES2138638	<0.0002	<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
Receptor	0020_SD026	04 Apr 2022	0020_SD026_220404	ES2212597	<0.0002	<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
Receptor	0020_SD026	11 Oct 2022	0020_SD026_221011	ES2237104	<0.0002	<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
Receptor	0020_SD026	17 Apr 2023	0020_SD026_230417	ES2313254	<0.0002	<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
Receptor	0020_SD026	16 Oct 2023	0020_SD026_ 231016	ES2336397	<0.0002	<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
Receptor	0020_SD026	08 Apr 2024	0020_QC102_240408	ES2411964	<0.0002	<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
Receptor	0020_SD026	08 Apr 2024	0020_QC202_240408	348827	<0.0001	<0.0002	<0.005	<0.0005	<0.0005	<0.001	<0.0002	<0.005	<0.001	<0.0002	<0.001	<0.001	<0.0002	<0.0001	<0.0001	<0.0002
Receptor	0020_SD026	08 Apr 2024	0020_SD026_240408	ES2411964	<0.0002	<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
Receptor	0020_SD026	25 Oct 2024	0020_SD026_241025	ES2435539	<0.0002	<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
Receptor	0020_SD026	31 Mar 2025	0020_QC101_250331	ES2510618	<0.0002	<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
Receptor	0020_SD026	31 Mar 2025	0020_QC201_250331	1209674	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
Receptor	0020_SD026	31 Mar 2025	0020_SD026_250331	ES2510618	<0.0002	<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

	kyl Carboxylic Acids					PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
	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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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	0.0001	0.0002	0.0005	0.0002	0.0002	0.0005	0.0002	0.0005	0.0005	0.0002	0.0005	0.0002	0.0002	0.0001	0.0001	0.0002
Statistics																
Number of Results	129	129	129	129	129	129	129	129	129	129	129	129	129	129	129	129
Number of Detects	2	11	0	4	18	0	0	2	0	0	0	8	0	0	1	1
Minimum Concentration	<0.0001	<0.0002	<0.0005	0.0002	0.0002	<0.0005	<0.0002	0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0001	<0.0001	<0.0002
Minimum Detect	0.0003	0.0003	ND	0.0002	0.0002	ND	ND	0.0005	ND	ND	ND	0.0003	ND	ND	0.0011	0.0007
Maximum Concentration	<0.005	<0.005	<0.0062	<0.005	<0.005	<0.0062	<0.01	<0.0062	<0.0062	<0.01	<0.0062	<0.005	<0.005	<0.005	<0.01	<0.005
Maximum Detect	0.0003	0.0022	ND	0.0002	0.0015	ND	ND	0.002	ND	ND	ND	0.0011	ND	ND	0.0011	0.0007
Average Concentration *	0.00022	0.0003	0.00053	0.00024	0.0003	0.0004	0.00034	0.00054	0.0004	0.00034	0.0004	0.00028	0.00036	0.00035	0.00047	0.00036
Geometric Average *	0.00012	0.00014	0.00033	0.00013	0.00016	0.0003	0.00012	0.00034	0.0003	0.00012	0.0003	0.00015	0.00027	0.00026	0.00027	0.00027
Median Concentration *	0.0001	0.0001	0.00025	0.0001	0.0001	0.00025	0.0001	0.00025	0.00025	0.0001	0.00025	0.0001	0.00025	0.00025	0.00025	0.00025
Standard Deviation *	0.00052	0.00058	0.00074	0.00051	0.00054	0.00054	0.001	0.00075	0.00054	0.001	0.00054	0.00053	0.00049	0.00049	0.001	0.00049
Geometric Standard Deviation *	2.1	2.5	2.1	2.1	2.4	1.8	2.4	2.2	1.8	2.4	1.8	2.4	1.8	1.9	2.2	1.8
95% UCL (Student's-t) *	0.00030016	0.00038195	0.00063517	0.00031223	0.00037602	0.00048164	0.00049259	0.0006522	0.00048164	0.00049259	0.00048164	0.00035791	0.00042589	0.00042305	0.00062236	0.0004295
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	2	9	0	3	14	0	0	2	0	0	0	6	0	0	1	1
% of Non-Detects	98	91	100	97	86	100	100	98	100	100	100	94	100	100	99	99
% 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.

					PFAS			PFAS - Sums				PFAS - Perfluoroalkyl Sulfonic Acids						PFAS - Perfluoroalkyl Carboxylic					
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic 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	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	0.005	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001
0020_0021_Activity specific HHRA EPC for clay pools					0.0014	0.0014		0.0014															
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																			
Receptor	0021_SD066	22 Mar 2018	UN2_SD01_0.0_180322	ES1808902	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
			UN2_SD01_0.2_180322	ES1814922	<0.0002	<0.0002	<0.0002	<0.0002	-	<0.0002	-	<0.0002	-	-	-	-	-	<0.001	-	-	<0.0002	<0.0002	-
		11 Feb 2019	UN2_SD01_0.0_190211	ES1904669	<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
		18 Mar 2019	UN2_SD01_190318	ES1908940	0.0005	<0.0002	<0.0002	0.0005	0.0005	0.0005	-	<0.0002	<0.0002	<0.0002	-	<0.0002	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
		12 Oct 2022	0021_SD066_221012	ES2237106	<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
		19 Apr 2023	0021_SD066_230419	ES2313364	<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
		18 Oct 2023	0021_QC110_231018	ES2336399	0.0005	<0.0002	<0.0002	0.0005	0.0005	0.0005	-	<0.0002	<0.0002	<0.0002	-	<0.0002	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
			0021_QC210_231018	335876	0.0007	0.0002	<0.0002	0.0009	0.0009	-	0.0007	<0.0002	<0.0004	<0.0002	-	<0.0002	-	<0.0004	<0.001	<0.001	<0.0002	<0.0002	<0.0002
			0021_SD066_231017	ES2336399	0.0007	0.0003	<0.0002	0.0010	0.0010	0.0010	-	<0.0002	<0.0002	<0.0002	-	<0.0002	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
		10 Apr 2024	0021_SD066_240410	ES2411995	0.0028	<0.0002	<0.0002	0.0028	0.0028	0.0028	-	<0.0002	<0.0002	<0.0002	-	<0.0002	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
		23 Oct 2024	0021_QC154_241023	ES2435078	0.0006	0.0002	<0.0002	0.0008	0.0008	0.0008	-	<0.0002	<0.0002	<0.0002	-	<0.0002	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
			0021_SD066_241023	ES2435078	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	<0.0002	<0.0002
		03 Apr 2025	0021_SD066_250402	ES2510622	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	<0.0002	<0.0002
	0021_SD067	22 Mar 2018	UN2_QC204_180322	601685	<0.005	<0.005	<0.005	<0.005	<0.05	<0.01	-	<0.005	<0.005	<0.005	-	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
			UN2_SD02_0.0_180322	ES1809902	<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
			UN2_SD02_0.2_180322	ES1814922	<0.0002	<0.0002	<0.0002	<0.0002	-	<0.0002	-	<0.0002	-	-	-	-	-	<0.001	-	-	<0.0002	<0.0002	-
			UN_QC104_180322	ES1809902	<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
		11 Feb 2019	UN2_SD02_0.0_190211	ES1904669	<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
		18 Mar 2019	UN2_QC106_190318	ES1908940	0.0002	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	<0.0002	<0.0002
			UN2_SD02_190318	ES1908940	<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
		12 Oct 2022	0021_SD067_221012	ES2237106	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
		19 Apr 2023	0021_SD067_230419	ES2313364	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	<0.0002	<0.0002
		18 Oct 2023	0021_SD067_231018	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]	-	<0.0005[#1]	-	<0.002[#1]	<0.0005[#1]	<0.0005[#1]	<0.0005[#1]	<0.0005[#1]	<0.0005[#1]
		10 Apr 2024	0021_SD067_240410	ES2411995	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	<0.0002	<0.0002
		23 Oct 2024	0021_SD067_241023	ES2435078	0.0004	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	<0.0002	<0.0002
		03 Apr 2025	0021_SD067_250402	ES2510622	0.0017	0.0004	<0.0002	0.0021	0.0021	0.0021	-	<0.0002	<0.0002	<0.0002	-	<0.0002	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
	0021_SD068	22 Mar 2018	UN2_SD03_0.0_180322	ES1809902	<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
			UN2_SD03_0.2_180322	ES1814922	<0.0002	<0.0002	<0.0002	<0.0002	-	<0.0002	-	<0.0002	-	-	-	-	-	<0.001	-	-	<0.0002	<0.0002	-
		11 Feb 2019	UN2_QC100_190211	ES1904669	<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
			UN2_QC200_190211	640876	<0.005	<0.005	<0.005	<0.005	<0.05	<0.01	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
			UN2_SD03_0.0_190211	ES1904669	<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
		18 Mar 2019	UN2_SD03_190318	ES1908940	<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
		12 Oct 2022	0021_SD068_221012	ES2237106	0.0013	0.0004	<0.0002	0.0017	0.0017	0.0017	-	<0.0002	<0.0002	<0.0002	-	<0.0002	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
		19 Apr 2023	0021_SD068_230419	ES2313364	0.0111	<0.0002	<0.0002	0.0111	0.0111	0.0111	-	<0.0002	<0.0002	<0.0002	-	<0.0002	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
		17 Oct 2023	0021_SD068_231017	ES2336399	0.0046	0.0010	<0.0002	0.0056	0.0056	0.0056	-	<0.0002	<0.0002	<0.0002	-	<0.0002	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
		10 Apr 2024	0021_SD068_240410	ES2411995	0.0049	0.0003	<0.0002	0.0052	0.0052	0.0052	-	<0.0002	<0.0002	<0.0002	-	<0.0002	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
		23 Oct 2024	0021_SD068_241023	ES2435078	0.0005	<0.0002	<0.0002	0.0005	0.0005	0.0005	-	<0.0002	<0.0002	<0.0002	-	<0.0002	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
		03 Apr 2025	0021_SD068_250402	ES2510622	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	<0.0002	<0.0002
	0021_SD069	22 Mar 2018	UN2_SD04_0.0_180322	ES1809902	0.0012	<0.0002	<0.0002	0.0012	0.0012	0.0012	-	<0.0002	<0.0002	<0.0002	-	<0.0002	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
			UN2_SD04_0.2_180322	ES1814922	0.0014	<0.0002	<0.0002	0.0014	-	0.0014	-	<0.0002	-	-	-	-	-	<0.001	-	-	<0.0002	<0.0002	-
		11 Feb 2019	UN2_SD04_0.0_190211	ES1904669	0.0008	<0.0002	<0.0002	0.0008	0.0008	0.0008	-	<0.0002	<0.0002	<0.0002	-	<0.0002	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
		18 Mar 2019	UN2_SD04_190318	ES1908940	0.0119	0.0010	<0.0002	0.0129	0.0129	0.0129	-	<0.0002	<0.0002	<0.0002	-	<0.0002	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
		12 Oct 2022	0021_SD069_221012	ES2237106	0.0046	0.0007	<0.0002	0.0053	0.0053	0.0053	-	<0.0002	<0.0002	<0.0002	-	<0.0002	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
		19 Apr 2023	0021_SD069_230419	ES2313364	0.0108	<0.0002	<0.0002	0.0108	0.0108	0.0108	-	<0.0002	<0.0002	<0.0002	-	<0.0002	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
		17 Oct 2023	0021_SD069_231017	ES2336399	0.0193	0.0012	<0.0002	0.0205	0.0205	0.0205	-	<0.0002	<0.0002	<0.0002	-	<0.0002	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
		10 Apr 2024	0021_QC107_240410	ES2411995	0.0460	0.0052	<0.0002	0.0512	0.0512	0.0512	-	<0.0002	<0.0002	<0.0002	-	<0.0002	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
			0021_QC207_240410	348825	0.043	0.0044	0.0002	0.047	0.048	-	0.043	0.0001	<0.0002	<0.0001	-	<0.0001	-	<0.0002	<0.002	<0.0050	0.0001	0.0004	0.0001
			0021_SD069_240410	ES2411995	0.0404	0.0044	<0.0002	0.0448	0.0457	0.0448	-	<0.0002	0.0009	<0.0002	-	<0.0002	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
		23 Oct 2024	0021_SD069_241023	ES2435078	0.0214	0.0020	0.0004	0.0234	0.0238	0.0238	-	<0.0002	<0.0002	<0.0002	-	<0.0002	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
		02 Apr 2025	0021_SD069_250402	ES2510622	0.0038	0.0003	<0.0002	0.0041	0.0044	0.0041	-	<0.0002	0.0003	<0.0002	-	<0.0002	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

					PFAS			PFAS - Sums				PFAS - Perfluoroalkyl Sulfonic Acids						PFAS - Perfluoroalkyl Carboxylic					
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic 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	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	0.005	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001
0020_0021_Activity specific HHRA EPC for clay pools					0.0014	0.0014		0.0014															
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																			
Receptor	0021_SD070	22 Mar 2018	UN2_SD05_0.0_180322	ES1809902	0.0007	<0.0002	<0.0002	0.0007	0.0007	0.0007	-	<0.0002	<0.0002	<0.0002	-	<0.0002	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
			UN2_SD05_0.2_180322	ES1814922	<0.0002	<0.0002	<0.0002	<0.0002	-	<0.0002	-	<0.0002	-	-	-	-	-	<0.001	-	-	<0.0002	<0.0002	-
		11 Feb 2019	UN2_SD05_0.0_190211	ES1904669	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	<0.0002	<0.0002
		18 Mar 2019	UN2_SD05_190318	ES1908940	0.0032	0.0008	<0.0002	0.0040	0.0040	0.0040	-	<0.0002	<0.0002	<0.0002	-	<0.0002	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
		12 Oct 2022	0021_QC212_221012	308187	0.0013	<0.0001	<0.0001	0.0013	0.0013	-	0.0013	<0.0001	<0.0002	<0.0001	-	<0.0001	-	<0.0002	<0.0005	<0.002	<0.0001	<0.0001	<0.0001
			0021_SD070_221012	ES2237106	<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
		19 Apr 2023	0021_SD070_230419	ES2313364	0.0037	<0.0002	<0.0002	0.0037	0.0037	0.0037	-	<0.0002	<0.0002	<0.0002	-	<0.0002	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
		17 Oct 2023	0021_SD070_231017	ES2336399	<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
		10 Apr 2024	0021_SD070_240410	ES2411995	0.0039	0.0010	<0.0002	0.0049	0.0049	0.0049	-	<0.0002	<0.0002	<0.0002	-	<0.0002	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
		23 Oct 2024	0021_SD070_241023	ES2435078	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
		02 Apr 2025	0021_SD070_250402	ES2510622	0.0107	0.0007	<0.0002	0.0114	0.0114	0.0114	-	<0.0002	<0.0002	<0.0002	-	<0.0002	-	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Statistics																							
Number of Results					61	61	61	61	56	58	3	61	56	56	1	56	1	61	56	56	61	61	56
Number of Detects					41	20	2	41	40	38	3	1	2	0	0	0	0	0	0	0	1	1	1
Minimum Concentration					0.0002	<0.0001	<0.0001	0.0002	0.0002	0.0002	0.0007	0.0001	<0.0002	<0.0001	<0.005	<0.0001	<0.005	<0.0002	<0.0002	<0.0002	0.0001	<0.0001	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	ND	ND	ND	ND	0.0001	0.0004	0.0001
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	<0.005	<0.005	<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	ND	ND	ND	ND	0.0001	0.0004	0.0001
Average Concentration *					0.0044	0.00056	0.00019	0.0048	0.0061	0.0043	0.015	0.00018	0.00021	0.00019		0.00019		0.00056	0.00021	0.00025	0.00018	0.00019	0.00019
Geometric Average *					0.00078	0.00021	0.00012	0.00084	0.0011	0.00079	0.0034	0.00011	0.00012	0.00011	0.0025	0.00011	0.0025	0.0005	0.00012	0.00013	0.00011	0.00011	0.00011
Median Concentration *					0.0006	0.0001	0.0001	0.0006	0.00065	0.0006	0.0013	0.0001	0.0001	0.0001	0.0025	0.0001	0.0025	0.0005	0.0001	0.0001	0.0001	0.0001	0.0001
Standard Deviation *					0.0099	0.0011	0.00043	0.011	0.012	0.0096	0.024	0.00043	0.00046	0.00045		0.00045		0.00038	0.00046	0.00055	0.00043	0.00043	0.00045
Geometric Standard Deviation *					6.4	3.3	1.9	6.6	7.1	6.5	9.2	1.8	2	1.9		1.9		1.6	2	2.2	1.8	1.9	1.9
95% UCL (Student's-t) *					0.00653	0.00078788	0.00027924	0.00714	0.00874	0.00643	0.0559	0.00027254	0.00031062	0.00028717		0.00028717		0.00063611	0.00031786	0.00037853	0.00027254	0.00027763	0.00028801
Number of Env Standard Exceedances					18	4	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Env Standard Exceedances (Detects Only)					18	4	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Detects					67	33	3	67	71	66	100	2	4	0	0	0	0	0	0	0	2	2	2
% of Non-Detects					33	67	97	33	29	34	0	98	96	100	100	100	100	100	100	100	98	98	98
% of Detects at or above Env Standards					30	7	0	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Results Below Env Standards or Non-Detect					70	93	100	69	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

Environmental Standards

JBRF/HMAS Creswell OMP Site Specific Criteria

					Acids				PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	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 (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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	0.0002	0.0001	0.0001	0.0002
0020_0021_Activity specific HHRA EPC for clay pools																			
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**															
Receptor	0021_SD066	22 Mar 2018	UN2_SD01_0.0_180322	ES1808902	<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
			UN2_SD01_0.2_180322	ES1814922	<0.0002	-	-	-	-	-	-	-	-	-	-	<0.0005	<0.0005	<0.0005	<0.0005
		11 Feb 2019	UN2_SD01_0.0_190211	ES1904669	<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
		18 Mar 2019	UN2_SD01_190318	ES1908940	<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
		12 Oct 2022	0021_SD066_221012	ES2237106	<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
		19 Apr 2023	0021_SD066_230419	ES2313364	<0.0002	<0.0006[#1]	<0.0002	<0.0002	<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
		18 Oct 2023	0021_QC110_231018	ES2336399	<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
			0021_QC210_231018	335876	<0.0004	<0.01	<0.001	<0.001	<0.002	<0.0004	<0.01	<0.002	<0.0004	<0.002	<0.002	<0.0004	<0.0002	<0.0002	<0.0004
			0021_SD066_231017	ES2336399	<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
		10 Apr 2024	0021_SD066_240410	ES2411995	<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
		23 Oct 2024	0021_QC154_241023	ES2435078	<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
			0021_SD066_241023	ES2435078	<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
		03 Apr 2025	0021_SD066_250402	ES2510622	<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
	0021_SD067	22 Mar 2018	UN2_QC204_180322	601685	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
			UN2_SD02_0.0_180322	ES1809902	<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
			UN2_SD02_0.2_180322	ES1814922	<0.0002	-	-	-	-	-	-	-	-	-	-	<0.0005	<0.0005	<0.0005	<0.0005
			UN_QC104_180322	ES1809902	<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
		11 Feb 2019	UN2_SD02_0.0_190211	ES1904669	<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
		18 Mar 2019	UN2_QC106_190318	ES1908940	<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
			UN2_SD02_190318	ES1908940	<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
		12 Oct 2022	0021_SD067_221012	ES2237106	<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
		19 Apr 2023	0021_SD067_230419	ES2313364	<0.0002	<0.0006[#1]	<0.0002	<0.0002	<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
		18 Oct 2023	0021_SD067_231018	ES2336399	<0.0005[#1]	<0.0012[#1]	<0.0005[#1]	<0.0005[#1]	<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
		10 Apr 2024	0021_SD067_240410	ES2411995	<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
		23 Oct 2024	0021_SD067_241023	ES2435078	<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
		03 Apr 2025	0021_SD067_250402	ES2510622	<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
	0021_SD068	22 Mar 2018	UN2_SD03_0.0_180322	ES1809902	<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
			UN2_SD03_0.2_180322	ES1814922	<0.0002	-	-	-	-	-	-	-	-	-	-	<0.0005	<0.0005	<0.0005	<0.0005
		11 Feb 2019	UN2_QC100_190211	ES1904669	<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
			UN2_QC200_190211	640876	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
			UN2_SD03_0.0_190211	ES1904669	<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
		18 Mar 2019	UN2_SD03_190318	ES1908940	<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
		12 Oct 2022	0021_SD068_221012	ES2237106	<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
		19 Apr 2023	0021_SD068_230419	ES2313364	<0.0002	<0.0006[#1]	<0.0002	<0.0002	<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
		17 Oct 2023	0021_SD068_231017	ES2336399	<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
		10 Apr 2024	0021_SD068_240410	ES2411995	<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
		23 Oct 2024	0021_SD068_241023	ES2435078	<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
		03 Apr 2025	0021_SD068_250402	ES2510622	<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
	0021_SD069	22 Mar 2018	UN2_SD04_0.0_180322	ES1809902	<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
			UN2_SD04_0.2_180322	ES1814922	<0.0002	-	-	-	-	-	-	-	-	-	-	<0.0005	<0.0005	<0.0005	<0.0005
		11 Feb 2019	UN2_SD04_0.0_190211	ES1904669	<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
		18 Mar 2019	UN2_SD04_190318	ES1908940	<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
		12 Oct 2022	0021_SD069_221012	ES2237106	<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
		19 Apr 2023	0021_SD069_230419	ES2313364	<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
		17 Oct 2023	0021_SD069_231017	ES2336399	<0.0002	<0.0006[#1]	<0.0002	<0.0002	<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
		10 Apr 2024	0021_QC107_240410	ES2411995	<0.0002	<0.0006[#1]	<0.0002	<0.0002	<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
			0021_QC207_240410	348825	<0.0002	<0.005	<0.0005	<0.002	<0.005	<0.0002	<0.02	<0.01	<0.0002	<0.005	<0.001	<0.0002	<0.0001	<0.0001	<0.0002
			0021_SD069_240410	ES2411995	<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
		23 Oct 2024	0021_SD069_241023	ES2435078	<0.0002	<0.0006[#1]	<0.0002	<0.0002	<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
		02 Apr 2025	0021_SD069_250402	ES2510622	<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

					Acids				PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					Perfluoropentanoic acid (PFPeA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	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 (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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	0.0002	0.0001	0.0001	0.0002
0020_0021_Activity specific HHRA EPC for clay pools																			
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**															
Receptor	0021_SD070	22 Mar 2018	UN2_SD05_0.0_180322	ES1809902	<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
			UN2_SD05_0.2_180322	ES1814922	<0.0002	-	-	-	-	-	-	-	-	-	-	<0.0005	<0.0005	<0.0005	<0.0005
		11 Feb 2019	UN2_SD05_0.0_190211	ES1904669	<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
		18 Mar 2019	UN2_SD05_190318	ES1908940	<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
		12 Oct 2022	0021_QC212_221012	308187	<0.0002	<0.005	<0.0005	<0.0005	<0.001	<0.0002	<0.005	<0.001	<0.0002	<0.001	<0.001	<0.0002	<0.0001	<0.0001	<0.0002
			0021_SD070_221012	ES2237106	<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
		19 Apr 2023	0021_SD070_230419	ES2313364	<0.0002	<0.0006[#1]	<0.0002	<0.0002	<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
		17 Oct 2023	0021_SD070_231017	ES2336399	<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
		10 Apr 2024	0021_SD070_240410	ES2411995	<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
		23 Oct 2024	0021_SD070_241023	ES2435078	<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
		02 Apr 2025	0021_SD070_250402	ES2510622	<0.0002	<0.0006[#1]	<0.0002	<0.0002	<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

Statistics

Number of Results	61	56	56	56	56	56	56	56	56	56	56	61	61	61	61
Number of Detects	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	<0.0002	<0.0001	<0.0001	<0.0002
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.005	<0.01	<0.005	<0.005	<0.005	<0.01	<0.02	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *	0.00018	0.00051	0.0002	0.00021	0.0004	0.00028	0.00064	0.00045	0.00028	0.0004	0.00022	0.00032	0.00031	0.0004	0.00032
Geometric Average *	0.00011	0.00032	0.00012	0.00012	0.00031	0.00012	0.00033	0.00031	0.00012	0.00031	0.00013	0.00026	0.00025	0.00026	0.00026
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	0.00025	0.00025	0.00025
Standard Deviation *	0.00043	0.00084	0.00045	0.00046	0.00052	0.00092	0.0015	0.00075	0.00092	0.00052	0.00046	0.00041	0.00041	0.00086	0.00041
Geometric Standard Deviation *	1.8	2	1.9	2	1.7	2.1	2.2	1.8	2.1	1.7	2.1	1.6	1.7	1.9	1.6
95% UCL (Student's-t) *	0.00027493	0.00069767	0.00030168	0.00031786	0.00051723	0.00048448	0.00097897	0.00061507	0.00048448	0.00051723	0.00032267	0.00040488	0.00040196	0.00057972	0.00040488
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 Reported Analyte LOR is higher than Requested Analyte LOR

Environmental Standards

JBRF/HMAS Creswell OMP Site Specific Criteria

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids						P			
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)
					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	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	0.005	0.0001	0.005	0.0001	0.0002	0.0002	0.0002	0.0001
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No**																		
Source	0020_SD028	10 Apr 2017	E_SED01_0-0.1	ES1708884	0.0015	0.0002	<0.0002	0.0017	0.0017	0.0017	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0020_SD028	18 Oct 2021	0020_SD028_211018	ES2138638	0.0087	0.0015	0.0005	0.0102	0.0107	0.0107	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0020_SD028	08 Apr 2022	0020_SD028_220408	ES2212597	0.0833	0.0044	0.0024	0.0877	0.103	0.0916	-	-	<0.0002	0.0021	-	0.0003	-	<0.0002	<0.001	0.0037	0.0016	0.0004
Source	0020_SD028	11 Oct 2022	0020_SD028_221011	ES2237104	0.0303	0.0029	0.0014	0.0332	0.0414	0.0359	-	-	<0.0002	0.0010	-	<0.0002	-	<0.0002	<0.001	0.0016	0.0007	0.0004
Source	0020_SD028	17 Apr 2023	0020_SD028_230417	ES2313254	0.0026	0.0004	0.0002	0.0030	0.0032	0.0032	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0020_SD028	16 Oct 2023	0020_SD028_ 231016	ES2336397	0.0032	0.0002	<0.0002	0.0034	0.0034	0.0034	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0020_SD028	08 Apr 2024	0020_SD028_240408	ES2411964	0.0094	0.0005	<0.0002	0.0099	0.0103	0.0099	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	0.0004	<0.0002	<0.0002
Source	0020_SD028	21 Oct 2024	0020_SD028_241021	ES2435143	0.0011	<0.0002	<0.0002	0.0011	0.0011	0.0011	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0020_SD028	31 Mar 2025	0020_SD028_250331	ES2510618	0.0010	<0.0002	<0.0002	0.0010	0.0010	0.0010	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0020_SD006	21 Mar 2018	FC_SD13_0.0_180321	ES1808818	0.0009	<0.0002	<0.0002	0.0009	0.0009	0.0009	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0020_SD006	19 Oct 2021	0020_SD006_211019	ES2138638	0.0027	0.0002	<0.0002	0.0029	0.0029	0.0029	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0020_SD006	04 Apr 2022	0020_SD006_220404	ES2212597	0.0010	<0.0002	<0.0002	0.0010	0.0010	0.0010	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0020_SD006	12 Oct 2022	0020_SD006_221012	ES2237104	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
Pathway	0020_SD006	17 Apr 2023	0020_SD006_230417	ES2313254	0.0005	<0.0002	<0.0002	0.0005	0.0005	0.0005	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0020_SD006	16 Oct 2023	0020_QC103_ 231016	ES2336397	0.0023	0.0002	<0.0002	0.0025	0.0025	0.0025	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0020_SD006	16 Oct 2023	0020_QC203_231016	335710	0.0049	0.0005	<0.0001	0.0054	0.0054	-	0.0049	-	<0.0001	<0.0002	-	<0.0001	-	<0.0001	<0.0002	<0.0005	<0.0005	<0.0001
Pathway	0020_SD006	16 Oct 2023	0020_SD006_ 231016	ES2336397	0.0022	0.0002	<0.0002	0.0024	0.0024	0.0024	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0020_SD006	08 Apr 2024	0020_SD006_240408	ES2411964	0.0030	0.0008	<0.0002	0.0038	0.0038	0.0038	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0020_SD006	31 Mar 2025	0020_SD006_250331	ES2510618	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
Pathway	0020_SD032	10 Apr 2017	F_SED01	ES1708884	0.0132	0.0008	<0.0002	0.0140	0.0140	0.0140	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0020_SD032	18 Oct 2021	0020_QC101_211018	ES2138638	0.0110	0.0015	<0.0002	0.0125	0.0127	0.0127	-	-	0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0020_SD032	18 Oct 2021	0020_SD032_211018	ES2138638	0.0104	0.0006	<0.0002	0.0110	0.0112	0.0110	-	-	<0.0002	<0.0002	-	0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0020_SD032	13 Dec 2021	0020_SD032_211213	ES2145964	0.127	0.0102	0.0003	0.137	0.151	0.139	-	-	0.0006	0.0026	-	0.0007	-	0.0004	<0.001	<0.0002	0.0007	<0.0002
Pathway	0020_SD032	04 Apr 2022	0020_SD032_220404	ES2212597	0.0156	0.0013	<0.0002	0.0169	0.0178	0.0169	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0020_SD032	10 Oct 2022	0020_SD032_221010	ES2237104	0.168	0.0133	0.0004	0.181	0.207	0.185	-	-	0.0006	0.0038	-	0.0008	-	0.0006	<0.001	<0.0002	0.0003	0.0005
Pathway	0020_SD032	17 Apr 2023	0020_QC100_230417	ES2313254	0.0096	0.0009	<0.0002	0.0105	0.0105	0.0105	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0020_SD032	17 Apr 2023	0020_QC200_230417	321518	0.0097	0.0012	<0.0001	0.011	0.011	-	0.0097	-	<0.0001	<0.0002	-	0.0001	-	<0.0001	<0.0002	<0.002	<0.0005	<0.0001
Pathway	0020_SD032	17 Apr 2023	0020_SD032_230417	ES2313254	0.0048	0.0005	<0.0002	0.0053	0.0053	0.0053	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0020_SD032	16 Oct 2023	0020_SD032_ 231016	ES2336397	0.0116	0.0008	<0.0002	0.0124	0.0124	0.0124	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0020_SD032	08 Apr 2024	0020_SD032_240408	ES2411964	0.0132	0.0011	<0.0002	0.0143	0.0154	0.0143	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0020_SD032	22 Oct 2024	0020_QC252_241022	1154740	0.017	<0.005	<0.005	0.017	<0.05	0.017	0.017	0.017	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Pathway	0020_SD032	22 Oct 2024	0020_SD032_241022	ES2435143	0.0102	0.0004	<0.0002	0.0106	0.0106	0.0106	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0020_SD032	31 Mar 2025	0020_QC132_250331	ES2510618	0.0064	0.0007	<0.0002	0.0071	0.0077	0.0071	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0020_SD032	31 Mar 2025	0020_QC232_250331	1209674	<0.005	<0.005	<0.005	<0.005	<0.05	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Pathway	0020_SD032	31 Mar 2025	0020_SD032_250331	ES2510618	0.0103	0.0010	<0.0002	0.0113	0.0119	0.0113	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0020_SD033	10 Apr 2017	F_SED02	ES1708884	0.0049	0.0006	<0.0002	0.0055	0.0216	0.0165	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	0.0009	<0.0002
Pathway	0020_SD033	19 Oct 2021	0020_SD033_211019	ES2138638	0.0231	0.0026	0.0005	0.0257	0.0473	0.0319	-	-	<0.0002	0.0010	-	<0.0002	-	<0.0002	<0.001	0.0006	0.0033	0.0010
Pathway	0020_SD033	13 Dec 2021	0020_SD033_211213	ES2145964	0.0457	0.0061	0.0005	0.0518	0.0804	0.0578	-	-	0.0003	0.0026	-	0.0002	-	0.0004	<0.001	0.0008	0.0043	0.0007
Pathway	0020_SD033	04 Apr 2022	0020_SD033_220404	ES2212597	0.0285	0.0024	<0.0002	0.0309	0.0446	0.0322	-	-	<0.0002	0.0013	-	<0.0002	-	<0.0002	<0.001	0.0003	0.0015	<0.0002
Pathway	0020_SD033	10 Oct 2022	0020_QC200_221010	308190	0.02	0.0015	<0.0001	0.021	0.028	-	0.02	-	<0.0001	0.001	-	0.0002	-	<0.0001	<0.0002	<0.0005	0.0006	<0.0001
Pathway	0020_SD033	10 Oct 2022	0020_SD033_221010	ES2237104	0.0120	0.0017	<0.0002	0.0137	0.0158	0.0137	-	-	<0.0002	0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	0.0005	<0.0002
Pathway	0020_SD033	17 Apr 2023	0020_SD033_230417	ES2313254	0.0110	0.0010	<0.0002	0.0120	0.0139	0.0126	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	0.0008	<0.0002
Pathway	0020_SD033	16 Oct 2023	0020_SD033_ 231016	ES2336397	0.0136	0.0012	<0.0002	0.0148	0.0222	0.0170	-	-	<0.0002	0.0012	-	<0.0002	-	<0.0002	<0.001	<0.0002	0.0008	0.0003
Pathway	0020_SD033	08 Apr 2024	0020_SD033_240408	ES2411964	0.0115	0.0019	<0.0002	0.0134	0.0199	0.0156	-	-	<0.0002	0.0005	-	<0.0002	-	<0.0002	<0.001	<0.0002	0.0010	0.0004
Pathway	0020_SD033	22 Oct 2024	0020_SD033_241022	ES2435143	0.0251	0.0019	0.0004	0.0270	0.0351	0.0297	-	-	<0.0002	0.0008	-	<0.0002	-	<0.0002	<0.001	0.0002	0.0011	0.0005
Pathway	0020_SD033	31 Mar 2025	0020_SD033_250331	ES2510618	0.0108	0.0015	<0.0002	0.0123	0.0164	0.0144	-	-	<0.0002	0.0005	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	0.0002
Pathway	0021_SD016	13 Apr 2017	DC_SED05_0-0.1	ES1709064	0.0258	0.0026	0.0003	0.0284	0.0293	0.0291	-	-	<0.0002	<0.0002	-	0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD016	20 Oct 2021	0021_SD016_211020	ES2138639	0.0151	0.0029	<0.0002	0.0180	0.0186	0.0184	-	-	<0.0002	0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD016	06 Apr 2022	0021_SD016_220406	ES2212442	0.0053	0.0050	0.0002	0.0103	0.0122	0.0119	-	-	<0.0002	<0.0002	-	0.0003	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD016	14 Oct 2022	0021_SD016_221014	ES2237106	0.0143	0.0014	<0.0002	0.0157	0.0172	0.0169	-	-	<0.0002	0.0003	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD016	21 Apr 2023	0021_SD016_230421	ES2313364	0.0118	0.0019	<0.0002	0.0137	0.0142	0.0140	-	-	<0.0002	0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD016	19 Oct 2023	0021_SD016_231019	ES2336399	0.0200	0.0044	<0.0002	0.0244	0.0257	0.0253	-	-	<0.0002	<0.0002	-	0.0002	-	0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD016	12 Apr 2024	0021_SD016_240412	ES2411995	0.0159	0.0027	<0.0002	0.0186	0.0189	0.0189	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD016	22 Oct 2024	0021_SD016_241022	ES2435078	0.0165	0.0037	<0.0002	0.0202	0.0206	0.0202	-	-	<0.0002	<0.0002	-	0.0002	-	0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD016	02 Apr 2025	0021_SD016_250402	ES2510622	0.0398	0.0103	0.0003	0.0501	0.0535	0.0507	-	-	<0.0002	0.0011	-	0.0005	-	0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD018	19 Apr 2017	FC_SED06_0.0-0.1	ES1709535	0.0198	0.0034	0.0003	0.0232	0.0248	0.0242	-	-	0.0004	<0.0002	-	0.0003	-	0.0003	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD018	20 Oct 2021	0021_QC209_211020	281322	0.17	0.025	0.0012	0.2	0.22	-	0.17	-	<0.001	<0.002	-	0.0020	-	<0.001	0.0065	<0.005	<0.005	<0.001
Pathway	0021_SD018	20 Oct 2021	0021_SD018_211020	ES2138639	0.0811	0.0169	0.0006	0.0980	0.106	0.104	-	-	0.0004	<0.0002	-	0.0015	-	0.0007	<0.001	<0.0002	<0.0002	0.0003
Pathway	0021_SD018	07 Apr 2022	0021_QC111_220407	ES2212442	0.0633	0.0085	0.0005	0.0718	0.0773	0.0753	-	-	<0.0002	0.0009	-	0.0006	-	0.0005	<0.001	<0.0002	<0.0002	0.0002
Pathway	0021_SD018	07 Apr 2022	0021_QC211_220407	293031	0.043	0.0042	<0.0003	0.047	0.049	-	0.043	-	<0.0003	0.0006	-	0.0004	-	<0.0003	<0.0006	<0.002	<0.002	<0.0003
Pathway	0021_SD018	07 Apr 2022	0021_SD018_220407	ES2212442	0.0344	0.0060	<0.0002	0.0404	0.0429	0.0420	-	-	0.0003	0.0003	-	0.0004	-	0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD018	12 Oct 2022	0021_SD018_221012	ES2237106	0.0415	0.0053	<0.0002	0.0468	0.0473	0.0473	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD018	19 Apr 2023	0021_SD018_230419	ES2313364	0.106	0.0114	0.0011	0.117	0.124	0.121	-	-	<0.0002	0.0015	-	0.0013	-	0.0004	<0.001	0.0002	<0.0002	<0.0002
Pathway	0021_SD018	18 Oct 2023	0021_SD018_231018	ES2336399	0.0177	0.0024	<0.0002	0.0201	0.0207	0.0205	-	-	0.0002	<0.0002	-	0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids						P			
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)
					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	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	0.005	0.0001	0.005	0.0001	0.0002	0.0002	0.0002	0.0001
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No**																		
Pathway	0021_SD018	10 Apr 2024	0021_SD018_240410	ES2411995	0.0534	0.0082	0.0002	0.0616	0.0634	0.0621	-	-	0.0003	0.0005	-	0.0004	-	0.0004	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD018	26 Oct 2024	0021_SD018_241026	ES2435541	0.0344	0.0032	<0.0002	0.0376	0.0379	0.0376	-	-	<0.0002	0.0003	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD018	03 Apr 2025	0021_SD018_250403	ES2510622	0.0341	0.0062	<0.0002	0.0403	0.0421	0.0403	-	-	<0.0002	0.0006	-	0.0003	-	0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD020	18 Apr 2017	JCQA04	543436	0.01	<0.005	<0.005	-	-	-	-	-	<0.005	<0.005	-	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005
Pathway	0021_SD020	19 Apr 2017	FC_SED08_0.0-0.05	ES1709535	0.0062	0.0035	0.0004	0.0097	0.0101	0.0101	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD020	20 Oct 2021	0021_QC109_211020	ES2138639	0.0003	0.0004	<0.0002	0.0007	0.0007	0.0007	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD020	20 Oct 2021	0021_SD020_211020	ES2138639	0.0007	0.0009	<0.0002	0.0016	0.0016	0.0016	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD020	07 Apr 2022	0021_SD020_220407	ES2212442	0.0014	0.0016	<0.0002	0.0030	0.0041	0.0035	-	-	<0.0002	<0.0002	-	0.0006	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD020	13 Oct 2022	0021_SD020_221013	ES2237106	0.0005	0.0005	<0.0002	0.0010	0.0010	0.0010	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD020	19 Apr 2023	0021_SD020_230419	ES2313364	0.0023	0.0010	<0.0002	0.0033	0.0033	0.0033	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD020	18 Oct 2023	0021_SD020_231018	ES2336399	0.0020	0.0014	<0.0002	0.0034	0.0045	0.0045	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD020	10 Apr 2024	0021_SD020_240410	ES2411995	0.0022	0.0013	<0.0002	0.0035	0.0035	0.0035	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD020	26 Oct 2024	0021_SD020_241026	ES2435541	0.0042	0.0026	<0.0002	0.0068	0.0068	0.0068	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD020	03 Apr 2025	0021_SD020_250403	ES2510622	0.0008	0.0006	<0.0002	0.0014	0.0014	0.0014	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD021	20 Apr 2017	AB_SED09_0-0.05	ES1709644	0.0068	0.0005	<0.0002	0.0073	0.0073	0.0073	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD021	26 Oct 2021	0021_SD021_211026	ES2138639	0.0384	0.0028	<0.0002	0.0412	0.0426	0.0421	-	-	0.0004	<0.0002	-	<0.0002	-	<0.0002	<0.001	0.0002	<0.0002	<0.0002
Pathway	0021_SD021	07 Apr 2022	0021_SD021_220407	ES2212442	0.0270	0.0022	<0.0002	0.0292	0.0304	0.0296	-	-	<0.0002	0.0003	-	0.0003	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD021	13 Oct 2022	0021_SD021_221013	ES2237106	0.0524	0.0027	0.0003	0.0551	0.0572	0.0561	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	0.0004	<0.0002	<0.0002
Pathway	0021_SD021	19 Apr 2023	0021_QC102_230419	ES2313364	0.0124	0.0007	<0.0002	0.0131	0.0145	0.0143	-	-	0.0010	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD021	19 Apr 2023	0021_QC202_230419	321517	0.018	0.0011	0.0002	0.019	0.021	-	0.018	-	<0.0001	0.0005	-	0.0001	-	<0.0001	0.0002	<0.0005	<0.0005	0.0001
Pathway	0021_SD021	19 Apr 2023	0021_SD021_230419	ES2313364	0.0254	0.0012	0.0002	0.0266	0.0283	0.0272	-	-	<0.0002	0.0004	-	<0.0002	-	<0.0002	<0.001	0.0003	<0.0002	<0.0002
Pathway	0021_SD021	18 Oct 2023	0021_SD021_231018	ES2336399	0.0052	0.0003	<0.0002	0.0055	0.0057	0.0057	-	-	0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD021	10 Apr 2024	0021_SD021_240410	ES2411995	0.0048	0.0010	<0.0002	0.0058	0.0058	0.0058	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD021	23 Oct 2024	0021_SD021_241023	ES2435078	0.0325	0.0027	0.0002	0.0352	0.0364	0.0358	-	-	<0.0002	<0.0002	-	0.0006	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD021	04 Apr 2025	0021_SD021_250404	ES2510622	0.0329	0.0045	0.0003	0.0374	0.0423	0.0403	-	-	<0.0002	<0.0002	-	0.0003	-	0.0002	<0.001	0.0002	<0.0002	0.0003
Receptor	0020_SD001	19 Apr 2017	FC_SED01_0-0.05	ES1709535	<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
Receptor	0020_SD001	15 May 2018	FC_QC215_180515	599245	<0.005	<0.005	<0.005	<0.005	<0.05	<0.01	-	-	<0.005	<0.005	-	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005
Receptor	0020_SD001	15 May 2018	FC_SD01_0.0_180515	ES1814324	<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
Receptor	0020_SD001	15 May 2018	FC_SD01_0.2_180515	ES1814324	<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
Receptor	0020_SD001	19 Oct 2021	0020_QC103_211019	ES2138638	<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
Receptor	0020_SD001	19 Oct 2021	0020_SD001_211019	ES2138638	<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
Receptor	0020_SD001	04 Apr 2022	0020_QC201_220404	293030	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	-	<0.0001	-	<0.0001	<0.0002	-	<0.0001	-	<0.0001	<0.0002	<0.0005	<0.0005	<0.0001
Receptor	0020_SD001	04 Apr 2022	0020_SD001_220404	ES2212597	<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
Receptor	0020_SD001	10 Oct 2022	0020_SD001_221010	ES2237104	<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
Receptor	0020_SD001	17 Apr 2023	0020_SD001_230417	ES2313254	<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
Receptor	0020_SD001	16 Oct 2023	0020_SD001_ 231016	ES2336397	<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
Receptor	0020_SD001	08 Apr 2024	0020_SD001_240408	ES2411964	<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
Receptor	0020_SD001	25 Oct 2024	0020_SD001_241025	ES2435539	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
Receptor	0020_SD001	01 Apr 2025	0020_QC253_250401	1209674	<0.005	<0.005	<0.005	<0.005	<0.05	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Receptor	0020_SD001	01 Apr 2025	0020_SD001_250401	ES2510618	<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
Receptor	0020_SD002	19 Apr 2017	FC_SED02_0-0.05	ES1709535	0.0034	0.0022	<0.0002	0.0056	0.006	0.0056	-	-	<0.0002	<0.0002	-	0.0004	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Receptor	0020_SD002	15 May 2018	FC_SD02_0.0_180515	ES1814324	<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
Receptor	0020_SD002	19 Oct 2021	0020_QC203_211019	281319	0.0002	<0.0001	<0.0001	0.0002	0.0002	-	0.0002	-	<0.0001	<0.0002	-	<0.0001	-	<0.0001	<0.0002	<0.0005	<0.0005	<0.0001
Receptor	0020_SD002	19 Oct 2021	0020_SD002_211019	ES2138638	<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
Receptor	0020_SD002	04 Apr 2022	0020_QC101_220404	ES2212597	<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
Receptor	0020_SD002	04 Apr 2022	0020_SD002_220404	ES2212597	<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
Receptor	0020_SD002	10 Oct 2022	0020_SD002_221010	ES2237104	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
Receptor	0020_SD002	17 Apr 2023	0020_SD002_230417	ES2313254	0.0032	0.0010	<0.0002	0.0042	0.0042	0.0042	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Receptor	0020_SD002	16 Oct 2023	0020_SD002_ 231016	ES2336397	<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
Receptor	0020_SD002	08 Apr 2024	0020_SD002_240408	ES2411964	0.0007	0.0004	<0.0002	0.0011	0.0011	0.0011	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Receptor	0020_SD002	25 Oct 2024	0020_SD002_241025	ES2435539	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
Receptor	0020_SD002	01 Apr 2025	0020_QC252_250401	1209674	<0.005	<0.005	<0.005	<0.005	<0.05	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Receptor	0020_SD002	01 Apr 2025	0020_SD002_250401	ES2510618	0.0017	0.0002	<0.0002	0.0019	0.0019	0.0019	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Receptor	0020_SD004	19 Apr 2017	FC_SED04_0-0.05	ES1709535	0.0009	0.0005	<0.0002	0.0014	0.0014	0.0014	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Receptor	0020_SD004	15 May 2018	FC_SD04_0.0_180515	ES1814324	0.0013	0.0004	<0.0002	0.0017	0.0017	0.0017	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Receptor	0020_SD004	15 May 2018	FC_SD04_0.2_180515	ES1814324	0.0012	0.0005	<0.0002	0.0017	0.0017	0.0017	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Receptor	0020_SD004	18 Oct 2021	0020_SD004_211018	ES2138638	0.0022	0.0003	<0.0002	0.0025	0.0025	0.0025	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Receptor	0020_SD004	04 Apr 2022	0020_SD004_220404	ES2212597	<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
Receptor	0020_SD004	10 Oct 2022	0020_SD004_221010	ES2237104	0.0007	<0.0002	<0.0002	0.0007	0.0007	0.0007	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Receptor	0020_SD004	17 Apr 2023	0020_SD004_230417	ES2313254	0.0017	<0.0002	<0.0002	0.0017	0.0017	0.0017	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Receptor	0020_SD004	16 Oct 2023	0020_SD004_ 231016	ES2336397	0.0056	0.0004	<0.0002	0.0060	0.0060	0.0060	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Receptor	0020_SD004	08 Apr 2024	0020_SD004_240408	ES2411964	0.0048	0.0003	<0.0002	0.0051	0.0051	0.0051	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Receptor	0020_SD004	21 Oct 2024	0020_QC150_241021	ES2435143	<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

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids						P			
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)
					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	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	0.005	0.0001	0.005	0.0001	0.0002	0.0002	0.0002	0.0001
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No**																		
Receptor	0020_SD004	21 Oct 2024	0020_SD004_241021	ES2435143	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
Receptor	0020_SD004	31 Mar 2025	0020_QC151_250331	ES2510618	<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
Receptor	0020_SD004	31 Mar 2025	0020_SD004_250331	ES2510618	<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
Receptor	0020_SD007	05 Apr 2018	FC_SD14_0.0_180406	ES1810551	<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
Receptor	0020_SD007	15 May 2018	FC_SD14_0.0_180515	ES1814324	<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
Receptor	0020_SD007	19 Oct 2021	0020_SD007_211019	ES2138638	<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
Receptor	0020_SD007	04 Apr 2022	0020_SD007_220404	ES2212597	<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
Receptor	0020_SD007	10 Oct 2022	0020_SD007_221010	ES2237104	<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
Receptor	0020_SD007	17 Apr 2023	0020_SD007_230417	ES2313254	<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
Receptor	0020_SD007	16 Oct 2023	0020_SD007_ 231016	ES2336397	<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
Receptor	0020_SD007	08 Apr 2024	0020_SD007_240408	ES2411964	<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
Receptor	0020_SD007	25 Oct 2024	0020_SD007_241025	ES2435539	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
Receptor	0020_SD007	01 Apr 2025	0020_SD007_250401	ES2510618	<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
Statistics																						
Number of Results					140	140	140	139	139	131	12	4	140	140	4	140	4	140	140	140	140	140
Number of Detects					106	89	24	105	104	98	8	1	12	27	0	28	0	14	2	12	14	13
Minimum Concentration					<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0002	<0.0001	<0.005	<0.0001	0.0002	<0.005	0.0001	<0.005	<0.0001	0.0002	0.0002	<0.0002	0.0001
Minimum Detect					0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.017	0.0002	0.0002	ND	0.0001	ND	0.0002	0.0002	0.0002	0.0003	0.0001
Maximum Concentration					0.17	0.025	<0.005	0.2	0.22	0.185	0.17	0.017	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0065	<0.005	<0.005	<0.005
Maximum Detect					0.17	0.025	0.0024	0.2	0.22	0.185	0.17	0.017	0.001	0.0038	ND	0.002	ND	0.0007	0.0065	0.0037	0.0043	0.001
Average Concentration *					0.014	0.0019	0.00028	0.016	0.019	0.015	0.024	0.0061	0.00023	0.00038	0.0025	0.00028	0.0025	0.00023	0.00061	0.00029	0.00035	0.00023
Geometric Average *					0.0025	0.00062	0.00014	0.0028	0.0032	0.0029	0.0051	0.004	0.00013	0.00017	0.0025	0.00015	0.0025	0.00013	0.00051	0.00014	0.00016	0.00013
Median Concentration *					0.0032	0.00065	0.0001	0.0038	0.0054	0.005	0.0073	0.0025	0.0001	0.0001	0.0025	0.0001	0.0025	0.0001	0.0005	0.0001	0.0001	0.0001
Standard Deviation *					0.027	0.0033	0.00054	0.031	0.034	0.028	0.048	0.0072	0.0005	0.00069	0	0.00053	0	0.00049	0.00065	0.00062	0.00071	0.0005
Geometric Standard Deviation *					9.3	4.8	2.4	9.7	10	9.6	9.5	2.6	2.2	2.8	1	2.4	1	2.1	1.7	2.4	2.7	2.2
95% UCL (Student's-t) *					0.0181	0.00235	0.00035231	0.0204	0.0235	0.0195	0.0488	0.0147	0.00029966	0.00047381	0.0025	0.00035356	0.0025	0.00029778	0.00070206	0.00037969	0.00044975	0.00030224
Number of Env Standard Exceedances					107	89	10	102	75	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Env Standard Exceedances (Detects Only)					103	83	4	102	70	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Detects					76	64	17	76	75	75	67	25	9	19	0	20	0	10	1	9	10	9
% of Non-Detects					24	36	83	24	25	25	33	75	91	81	100	80	100	90	99	91	90	91
% of Detects at or above Env Standards					74	59	3	73	50	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Results Below Env Standards or Non-Detect					26	41	97	27	50	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

					FAS - Perfluoroalkyl Carboxylic Acids						PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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	mg/kg
EQL					0.0001	0.0001	0.0002	0.0005	0.0002	0.0002	0.0005	0.0002	0.0005	0.0005	0.0002	0.0005	0.0002	0.0002	0.0001	0.0001	0.0002
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No**																	
Source	0020_SD028	10 Apr 2017	E_SED01_0-0.1	ES1708884	<0.0002	<0.0002	<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
Source	0020_SD028	18 Oct 2021	0020_SD028_211018	ES2138638	<0.0002	<0.0002	<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
Source	0020_SD028	08 Apr 2022	0020_SD028_220408	ES2212597	0.0006	0.0006	0.0005	<0.0005	<0.0002	0.0014	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	0.0005	0.0008	<0.0005	<0.0005	<0.0005	<0.0005
Source	0020_SD028	11 Oct 2022	0020_SD028_221011	ES2237104	0.0007	0.0005	0.0002	<0.0005	0.0002	0.0007	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0008	<0.0005	<0.0005	<0.0005	<0.0005
Source	0020_SD028	17 Apr 2023	0020_SD028_230417	ES2313254	<0.0002	<0.0002	<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
Source	0020_SD028	16 Oct 2023	0020_SD028_ 231016	ES2336397	<0.0002	<0.0002	<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
Source	0020_SD028	08 Apr 2024	0020_SD028_240408	ES2411964	<0.0002	<0.0002	<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
Source	0020_SD028	21 Oct 2024	0020_SD028_241021	ES2435143	<0.0002	<0.0002	<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
Source	0020_SD028	31 Mar 2025	0020_SD028_250331	ES2510618	<0.0002	<0.0002	<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
Pathway	0020_SD006	21 Mar 2018	FC_SD13_0.0_180321	ES1808818	<0.0002	<0.0002	<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
Pathway	0020_SD006	19 Oct 2021	0020_SD006_211019	ES2138638	<0.0002	<0.0002	<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
Pathway	0020_SD006	04 Apr 2022	0020_SD006_220404	ES2212597	<0.0002	<0.0002	<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
Pathway	0020_SD006	12 Oct 2022	0020_SD006_221012	ES2237104	<0.0002	<0.0002	<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
Pathway	0020_SD006	17 Apr 2023	0020_SD006_230417	ES2313254	<0.0002	<0.0002	<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
Pathway	0020_SD006	16 Oct 2023	0020_QC103_ 231016	ES2336397	<0.0002	<0.0002	<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
Pathway	0020_SD006	16 Oct 2023	0020_QC203_231016	335710	<0.0001	<0.0001	<0.0002	<0.005	<0.0005	<0.0005	<0.001	<0.0002	<0.005	<0.001	<0.0002	<0.001	<0.001	<0.0002	<0.0001	<0.0001	<0.0002
Pathway	0020_SD006	16 Oct 2023	0020_SD006_ 231016	ES2336397	<0.0002	<0.0002	<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
Pathway	0020_SD006	08 Apr 2024	0020_SD006_240408	ES2411964	<0.0002	<0.0002	<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
Pathway	0020_SD006	31 Mar 2025	0020_SD006_250331	ES2510618	<0.0002	<0.0002	<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
Pathway	0020_SD032	10 Apr 2017	F_SED01	ES1708884	<0.0002	<0.0002	<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
Pathway	0020_SD032	18 Oct 2021	0020_QC101_211018	ES2138638	<0.0002	<0.0002	<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
Pathway	0020_SD032	18 Oct 2021	0020_SD032_211018	ES2138638	<0.0002	<0.0002	<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
Pathway	0020_SD032	13 Dec 2021	0020_SD032_211213	ES2145964	0.0005	<0.0002	0.0004	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0073	<0.0005	<0.0005	<0.0005	<0.0005
Pathway	0020_SD032	04 Apr 2022	0020_SD032_220404	ES2212597	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	0.0003	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	<0.0005
Pathway	0020_SD032	10 Oct 2022	0020_SD032_221010	ES2237104	0.0010	<0.0002	0.0011	<0.0005	<0.0002	0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0167	<0.0005	<0.0005	<0.0005	<0.0005
Pathway	0020_SD032	17 Apr 2023	0020_QC100_230417	ES2313254	<0.0002	<0.0002	<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
Pathway	0020_SD032	17 Apr 2023	0020_QC200_230417	321518	<0.0001	<0.0001	<0.0002	<0.005	<0.0005	<0.0005	<0.001	<0.0002	<0.005	<0.001	<0.0002	<0.001	<0.005	<0.0002	<0.0001	0.0001	<0.0002
Pathway	0020_SD032	17 Apr 2023	0020_SD032_230417	ES2313254	<0.0002	<0.0002	<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
Pathway	0020_SD032	16 Oct 2023	0020_SD032_ 231016	ES2336397	<0.0002	<0.0002	<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
Pathway	0020_SD032	08 Apr 2024	0020_SD032_240408	ES2411964	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0003	<0.0005	0.0008	<0.0005	<0.0005
Pathway	0020_SD032	22 Oct 2024	0020_QC252_241022	1154740	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
Pathway	0020_SD032	22 Oct 2024	0020_SD032_241022	ES2435143	<0.0002	<0.0002	<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
Pathway	0020_SD032	31 Mar 2025	0020_QC132_250331	ES2510618	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	<0.0005
Pathway	0020_SD032	31 Mar 2025	0020_QC232_250331	1209674	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
Pathway	0020_SD032	31 Mar 2025	0020_SD032_250331	ES2510618	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	<0.0005
Pathway	0020_SD033	10 Apr 2017	F_SED02	ES1708884	0.0002	<0.0002	<0.0002	<0.0005	<0.0002	0.0006	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0012	0.0024	<0.0005	0.0071	0.0037
Pathway	0020_SD033	19 Oct 2021	0020_SD033_211019	ES2138638	0.0010	0.0004	0.0031	0.0010	0.0008	0.0021	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0048	0.0014	<0.0005	0.0006	<0.0005
Pathway	0020_SD033	13 Dec 2021	0020_SD033_211213	ES2145964	0.0012	0.0004	0.0022	0.0011	0.0012	0.0024	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0072	0.0020	<0.0005	0.0011	<0.0005
Pathway	0020_SD033	04 Apr 2022	0020_SD033_220404	ES2212597	0.0008	0.0002	0.0005	0.0008	0.0003	0.0005	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0064	0.0011	<0.0005	<0.0005	<0.0005
Pathway	0020_SD033	10 Oct 2022	0020_QC200_221010	308190	0.0003	<0.0001	0.0003	<0.005	0.0007	<0.0005	<0.001	<0.0002	<0.005	<0.001	<0.0002	<0.001	0.003	0.0002	<0.0001	0.0002	<0.0002
Pathway	0020_SD033	10 Oct 2022	0020_SD033_221010	ES2237104	<0.0002	<0.0002	<0.0002	<0.0005	0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0012	<0.0005	<0.0005	<0.0005	<0.0005
Pathway	0020_SD033	17 Apr 2023	0020_SD033_230417	ES2313254	0.0002	<0.0002	0.0004	<0.0005	0.0002	0.0003	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Pathway	0020_SD033	16 Oct 2023	0020_SD033_ 231016	ES2336397	0.0005	<0.0002	0.0014	0.0010	0.0006	0.0004	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0012	<0.0005	<0.0005	<0.0005	<0.0005
Pathway	0020_SD033	08 Apr 2024	0020_SD033_240408	ES2411964	0.0005	<0.0002	0.0013	<0.0005	0.0006	0.0003	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0019	<0.0005	<0.0005	<0.0005	<0.0005
Pathway	0020_SD033	22 Oct 2024	0020_SD033_241022	ES2435143	0.0004	<0.0002	0.0014	0.0007	0.0004	0.0004	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0018	<0.0005	<0.0005	<0.0005	<0.0005
Pathway	0020_SD033	31 Mar 2025	0020_SD033_250331	ES2510618	0.0003	<0.0002	0.0016	<0.0005	0.0003	0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0010	<0.0005	<0.0005	<0.0005	<0.0005
Pathway	0021_SD016	13 Apr 2017	DC_SED05_0-0.1	ES1709064	0.0004	<0.0002	<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
Pathway	0021_SD016	20 Oct 2021	0021_SD016_211020	ES2138639	0.0004	<0.0002	<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
Pathway	0021_SD016	06 Apr 2022	0021_SD016_220406	ES2212442	0.0010	<0.0002	0.0004	<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
Pathway	0021_SD016	14 Oct 2022	0021_SD016_221014	ES2237106	0.0009	<0.0002	0.0003	<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
Pathway	0021_SD016	21 Apr 2023	0021_SD016_230421	ES2313364	0.0003	<0.0002	<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
Pathway	0021_SD016	19 Oct 2023	0021_SD016_231019	ES2336399	0.0007	<0.0002	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
Pathway	0021_SD016	12 Apr 2024	0021_SD016_240412	ES2411995	0.0003	<0.0002	<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
Pathway	0021_SD016	22 Oct 2024	0021_SD016_241022	ES2435078	<0.0002	<0.0002	<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
Pathway	0021_SD016	02 Apr 2025	0021_SD016_250402	ES2510622	0.0003	<0.0002	<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
Pathway	0021_SD018	19 Apr 2017	FC_SED06_0.0-0.1	ES1709535	0.0003	<0.0002	<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
Pathway	0021_SD018	20 Oct 2021	0021_QC209_211020	281322	0.0062	<0.001	0.0059	<0.05	<0.005	<0.005	<0.01	<0.0020	<0.05	<0.01	<0.002	<0.01	<0.01	<0.002	<0.001	<0.001	<0.002
Pathway	0021_SD018	20 Oct 2021	0021_SD018_211020	ES2138639	0.0026	<0.0002	0.0020	<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
Pathway	0021_SD018	07 Apr 2022	0021_QC111_220407	ES2212442	0.0021	<0.0002	0.0007	<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
Pathway	0021_SD018	07 Apr 2022	0021_QC211_220407	293031	0.0005	<0.0003	<0.0006	<0.02	<0.002	<0.002	<0.003	<0.0006	<0.02	<0.003	<0.0006	<0.003	<0.003	<0.0006	<0.0003	<0.0003	<0.0006
Pathway	0021_SD018	07 Apr 2022	0021_SD018_220407	ES2212442	0.0010	<0.0002	0.0003	<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
Pathway	0021_SD018	12 Oct 2022	0021_SD018_221012	ES2237106	0.0005	<0.0002	<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
Pathway	0021_SD018	19 Apr 2023	0021_SD018_230419	ES2313364	0.0012	<0.0002	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	0.0008	<0.0005
Pathway	0021_SD018	18 Oct 2023	0021_SD018_231018	ES2336399	0.0002	<0.0002	<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

					FAS - Perfluoroalkyl Carboxylic Acids						PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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	mg/kg
EQL					0.0001	0.0001	0.0002	0.0005	0.0002	0.0002	0.0005	0.0002	0.0005	0.0005	0.0002	0.0005	0.0002	0.0002	0.0001	0.0001	0.0002
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No**																	
Pathway	0021_SD018	10 Apr 2024	0021_SD018_240410	ES2411995	<0.0002	<0.0002	<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
Pathway	0021_SD018	26 Oct 2024	0021_SD018_241026	ES2435541	<0.0002	<0.0002	<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
Pathway	0021_SD018	03 Apr 2025	0021_SD018_250403	ES2510622	<0.0002	<0.0002	<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
Pathway	0021_SD020	18 Apr 2017	JCQA04	543436	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
Pathway	0021_SD020	19 Apr 2017	FC_SED08_0.0-0.05	ES1709535	<0.0002	<0.0002	<0.0002	<0.0006	<0.0002	<0.0002	<0.0006	<0.0002	<0.0006	<0.0006	<0.0002	<0.0006	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Pathway	0021_SD020	20 Oct 2021	0021_QC109_211020	ES2138639	<0.0002	<0.0002	<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
Pathway	0021_SD020	20 Oct 2021	0021_SD020_211020	ES2138639	<0.0002	<0.0002	<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
Pathway	0021_SD020	07 Apr 2022	0021_SD020_220407	ES2212442	0.0005	<0.0002	<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
Pathway	0021_SD020	13 Oct 2022	0021_SD020_221013	ES2237106	<0.0002	<0.0002	<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
Pathway	0021_SD020	19 Apr 2023	0021_SD020_230419	ES2313364	<0.0002	<0.0002	<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
Pathway	0021_SD020	18 Oct 2023	0021_SD020_231018	ES2336399	0.0004	<0.0002	0.0007	<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
Pathway	0021_SD020	10 Apr 2024	0021_SD020_240410	ES2411995	<0.0002	<0.0002	<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
Pathway	0021_SD020	26 Oct 2024	0021_SD020_241026	ES2435541	<0.0002	<0.0002	<0.0002	<0.0006[#1]	<0.0002	<0.0002	<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
Pathway	0021_SD020	03 Apr 2025	0021_SD020_250403	ES2510622	<0.0002	<0.0002	<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
Pathway	0021_SD021	20 Apr 2017	AB_SED09_0-0.05	ES1709644	<0.0002	<0.0002	<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
Pathway	0021_SD021	26 Oct 2021	0021_SD021_211026	ES2138639	0.0005	<0.0002	<0.0002	<0.0005	<0.0002	0.0003	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Pathway	0021_SD021	07 Apr 2022	0021_SD021_220407	ES2212442	0.0004	<0.0002	<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
Pathway	0021_SD021	13 Oct 2022	0021_SD021_221013	ES2237106	0.0005	<0.0002	0.0002	<0.0005	<0.0002	0.0007	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Pathway	0021_SD021	19 Apr 2023	0021_QC102_230419	ES2313364	0.0002	<0.0002	<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
Pathway	0021_SD021	19 Apr 2023	0021_QC202_230419	321517	0.0004	<0.0001	<0.0002	<0.005	<0.0005	<0.0005	<0.001	<0.0002	<0.005	<0.001	<0.0002	<0.001	<0.001	<0.0002	<0.0001	<0.0001	<0.0002
Pathway	0021_SD021	19 Apr 2023	0021_SD021_230419	ES2313364	0.0004	<0.0002	<0.0002	<0.0005	<0.0002	0.0004	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Pathway	0021_SD021	18 Oct 2023	0021_SD021_231018	ES2336399	<0.0002	<0.0002	<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
Pathway	0021_SD021	10 Apr 2024	0021_SD021_240410	ES2411995	<0.0002	<0.0002	<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
Pathway	0021_SD021	23 Oct 2024	0021_SD021_241023	ES2435078	0.0004	<0.0002	<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
Pathway	0021_SD021	04 Apr 2025	0021_SD021_250404	ES2510622	0.0016	<0.0002	0.0007	<0.0005	<0.0002	0.0005	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Receptor	0020_SD001	19 Apr 2017	FC_SED01_0-0.05	ES1709535	<0.0002	<0.0002	<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
Receptor	0020_SD001	15 May 2018	FC_QC215_180515	599245	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
Receptor	0020_SD001	15 May 2018	FC_SD01_0.0_180515	ES1814324	<0.0002	<0.0002	<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
Receptor	0020_SD001	15 May 2018	FC_SD01_0.2_180515	ES1814324	<0.0002	<0.0002	<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
Receptor	0020_SD001	19 Oct 2021	0020_QC103_211019	ES2138638	<0.0002	<0.0002	<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
Receptor	0020_SD001	19 Oct 2021	0020_SD001_211019	ES2138638	<0.0002	<0.0002	<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
Receptor	0020_SD001	04 Apr 2022	0020_QC201_220404	293030	<0.0001	<0.0001	<0.0002	<0.005	<0.0005	<0.0005	<0.001	<0.0002	<0.005	<0.001	<0.0002	<0.001	<0.001	<0.0002	<0.0001	<0.0001	<0.0002
Receptor	0020_SD001	04 Apr 2022	0020_SD001_220404	ES2212597	<0.0002	<0.0002	<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
Receptor	0020_SD001	10 Oct 2022	0020_SD001_221010	ES2237104	<0.0002	<0.0002	<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
Receptor	0020_SD001	17 Apr 2023	0020_SD001_230417	ES2313254	<0.0002	<0.0002	<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
Receptor	0020_SD001	16 Oct 2023	0020_SD001_ 231016	ES2336397	<0.0002	<0.0002	<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
Receptor	0020_SD001	08 Apr 2024	0020_SD001_240408	ES2411964	<0.0002	<0.0002	<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
Receptor	0020_SD001	25 Oct 2024	0020_SD001_241025	ES2435539	<0.0002	<0.0002	<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
Receptor	0020_SD001	01 Apr 2025	0020_QC253_250401	1209674	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
Receptor	0020_SD001	01 Apr 2025	0020_SD001_250401	ES2510618	<0.0002	<0.0002	<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
Receptor	0020_SD002	19 Apr 2017	FC_SED02_0-0.05	ES1709535	<0.0002	<0.0002	<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
Receptor	0020_SD002	15 May 2018	FC_SD02_0.0_180515	ES1814324	<0.0002	<0.0002	<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
Receptor	0020_SD002	19 Oct 2021	0020_QC203_211019	281319	<0.0001	<0.0001	<0.0002	<0.005	<0.0005	<0.0005	<0.001	<0.0002	<0.005	<0.001	<0.0002	<0.001	<0.001	<0.0002	<0.0001	<0.0001	<0.0002
Receptor	0020_SD002	19 Oct 2021	0020_SD002_211019	ES2138638	<0.0002	<0.0002	<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
Receptor	0020_SD002	04 Apr 2022	0020_QC101_220404	ES2212597	<0.0002	<0.0002	<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
Receptor	0020_SD002	04 Apr 2022	0020_SD002_220404	ES2212597	<0.0002	<0.0002	<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
Receptor	0020_SD002	10 Oct 2022	0020_SD002_221010	ES2237104	<0.0002	<0.0002	<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
Receptor	0020_SD002	17 Apr 2023	0020_SD002_230417	ES2313254	<0.0002	<0.0002	<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
Receptor	0020_SD002	16 Oct 2023	0020_SD002_ 231016	ES2336397	<0.0002	<0.0002	<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
Receptor	0020_SD002	08 Apr 2024	0020_SD002_240408	ES2411964	<0.0002	<0.0002	<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
Receptor	0020_SD002	25 Oct 2024	0020_SD002_241025	ES2435539	<0.0002	<0.0002	<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
Receptor	0020_SD002	01 Apr 2025	0020_QC252_250401	1209674	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
Receptor	0020_SD002	01 Apr 2025	0020_SD002_250401	ES2510618	<0.0002	<0.0002	<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
Receptor	0020_SD004	19 Apr 2017	FC_SED04_0-0.05	ES1709535	<0.0002	<0.0002	<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
Receptor	0020_SD004	15 May 2018	FC_SD04_0.0_180515	ES1814324	<0.0002	<0.0002	<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
Receptor	0020_SD004	15 May 2018	FC_SD04_0.2_180515	ES1814324	<0.0002	<0.0002	<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
Receptor	0020_SD004	18 Oct 2021	0020_SD004_211018	ES2138638	<0.0002	<0.0002	<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
Receptor	0020_SD004	04 Apr 2022	0020_SD004_220404	ES2212597	<0.0002	<0.0002	<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
Receptor	0020_SD004	10 Oct 2022	0020_SD004_221010	ES2237104	<0.0002	<0.0002	<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
Receptor	0020_SD004	17 Apr 2023	0020_SD004_230417	ES2313254	<0.0002	<0.0002	<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
Receptor	0020_SD004	16 Oct 2023	0020_SD004_ 231016	ES2336397	<0.0002	<0.0002	<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
Receptor	0020_SD004	08 Apr 2024	0020_SD004_240408	ES2411964	<0.0002	<0.0002	<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
Receptor	0020_SD004	21 Oct 2024	0020_QC150_241021	ES2435143	<0.0002	<0.0002	<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

					FAS - Perfluoroalkyl Carboxylic Acids						PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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	mg/kg
EQL					0.0001	0.0001	0.0002	0.0005	0.0002	0.0002	0.0005	0.0002	0.0005	0.0005	0.0002	0.0005	0.0002	0.0002	0.0001	0.0001	0.0002
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No**																	
Receptor	0020_SD004	21 Oct 2024	0020_SD004_241021	ES2435143	<0.0002	<0.0002	<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
Receptor	0020_SD004	31 Mar 2025	0020_QC151_250331	ES2510618	<0.0002	<0.0002	<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
Receptor	0020_SD004	31 Mar 2025	0020_SD004_250331	ES2510618	<0.0002	<0.0002	<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
Receptor	0020_SD007	05 Apr 2018	FC_SD14_0.0_180406	ES1810551	<0.0002	<0.0002	<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
Receptor	0020_SD007	15 May 2018	FC_SD14_0.0_180515	ES1814324	<0.0002	<0.0002	<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
Receptor	0020_SD007	19 Oct 2021	0020_SD007_211019	ES2138638	<0.0002	<0.0002	<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
Receptor	0020_SD007	04 Apr 2022	0020_SD007_220404	ES2212597	<0.0002	<0.0002	<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
Receptor	0020_SD007	10 Oct 2022	0020_SD007_221010	ES2237104	<0.0002	<0.0002	<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
Receptor	0020_SD007	17 Apr 2023	0020_SD007_230417	ES2313254	<0.0002	<0.0002	<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
Receptor	0020_SD007	16 Oct 2023	0020_SD007_ 231016	ES2336397	<0.0002	<0.0002	<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
Receptor	0020_SD007	08 Apr 2024	0020_SD007_240408	ES2411964	<0.0002	<0.0002	<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
Receptor	0020_SD007	25 Oct 2024	0020_SD007_241025	ES2435539	<0.0002	<0.0002	<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
Receptor	0020_SD007	01 Apr 2025	0020_SD007_250401	ES2510618	<0.0002	<0.0002	<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
Statistics																					
Number of Results					140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140
Number of Detects					41	5	24	5	11	18	0	0	0	0	1	1	18	5	1	6	1
Minimum Concentration					<0.0001	<0.0001	0.0002	<0.0005	0.0002	0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	0.0005	<0.0002	0.0002	<0.0001	0.0001	<0.0002
Minimum Detect					0.0002	0.0002	0.0002	0.0007	0.0002	0.0002	ND	ND	ND	ND	0.0003	0.0005	0.0003	0.0002	0.0008	0.0001	0.0037
Maximum Concentration					0.0062	<0.005	0.0059	<0.05	<0.005	<0.005	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	0.0167	<0.005	<0.005	<0.01	<0.005
Maximum Detect					0.0062	0.0006	0.0059	0.0011	0.0012	0.0024	ND	ND	ND	ND	0.0003	0.0005	0.0167	0.0024	0.0008	0.0071	0.0037
Average Concentration *					0.0004	0.00022	0.00037	0.00071	0.00026	0.0003	0.0004	0.00032	0.00069	0.0004	0.00032	0.0004	0.00067	0.00039	0.00034	0.00051	0.00037
Geometric Average *					0.00019	0.00012	0.00016	0.00034	0.00014	0.00015	0.00029	0.00012	0.00032	0.00029	0.00012	0.0003	0.00019	0.00028	0.00026	0.00028	0.00027
Median Concentration *					0.0001	0.0001	0.0001	0.00025	0.0001	0.0001	0.00025	0.0001	0.00025	0.00025	0.0001	0.00025	0.0001	0.00025	0.00025	0.00025	0.00025
Standard Deviation *					0.00077	0.00049	0.00078	0.0023	0.00054	0.00059	0.00061	0.001	0.0023	0.00061	0.001	0.00061	0.0019	0.00052	0.00046	0.0011	0.00054
Geometric Standard Deviation *					2.9	2.1	2.7	2.3	2.3	2.5	1.7	2.3	2.2	1.7	2.3	1.7	3.5	1.8	1.8	2.1	1.8
95% UCL (Student's-t) *					0.00051068	0.00028404	0.00048213	0.00104	0.00033854	0.00038663	0.00048606	0.00045744	0.00101	0.00048606	0.00045884	0.00048784	0.00093396	0.00046184	0.00040764	0.00066565	0.00044632
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					29	4	17	4	8	13	0	0	0	0	1	1	13	4	1	4	1
% of Non-Detects					71	96	83	96	92	87	100	100	100	100	99	99	87	96	99	96	99
% 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 Reported Analyte LOR is higher than Requested Analyte LOR

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids							PFAS			
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)
					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	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	0.005	0.0001	0.005	0.0001	0.005	0.0002	0.0002	0.0002	0.0001
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																			
Pathway	0021_SD029	11 Feb 2019	LM_SD04_0.0_190211	ES1904669	<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
			LM_SD04_0.2_190211	ES1904669	<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
		18 Mar 2019	LM_QC102_190318	ES1908940	<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
			LM_SD04_190318	ES1908940	<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
		22 Oct 2021	0021_SD029_211022	ES2138639	<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
		05 Apr 2022	0021_SD029_220405	ES2212442	<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
		11 Oct 2022	0021_SD029_221010	ES2237106	<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
		18 Apr 2023	0021_SD029_230418	ES2313364	<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
		17 Oct 2023	0021_SD029_231017	ES2336399	<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
		10 Apr 2024	0021_SD029_240410	ES2411995	<0.0002	<0.0002	<0.0002	<0.0002	0.0012	<0.0002	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	-	<0.001	<0.0002	<0.0002	<0.0002
		26 Oct 2024	0021_SD029_241026	ES2435541	<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
		03 Apr 2025	0021_SD029_250403	ES2510622	<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
Receptor	0021_SD028	14 May 2018	LM_SD03_0.0_180514	ES1814324	<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
		21 Oct 2021	0021_SD028_211021	ES2138639	<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
		05 Apr 2022	0021_SD028_220405	ES2212442	<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
		10 Oct 2022	0021_SD028_221010	ES2237106	<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
		18 Apr 2023	0021_SD028_230418	ES2313364	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	-	<0.001	<0.0002	<0.0002	<0.0002
		17 Oct 2023	0021_SD028_231017	ES2336399	<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
		09 Apr 2024	0021_SD028_240409	ES2411995	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
		25 Oct 2024	0021_SD028_241025	ES2435541	<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
		04 Apr 2025	0021_SD028_250404	ES2510622	0.0008	<0.0002	<0.0002	0.0008	0.0008	0.0008	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	-	<0.001	<0.0002	<0.0002	<0.0002
	0021_SD030	14 May 2018	LW_SD01_0.0_180514	ES1814324	<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
		12 Feb 2019	LW_QC208_190212	640876	<0.005	<0.005	<0.005	<0.005	<0.05	<0.01	-	-	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
			LW_SD01_0.0_190212	ES1904669	<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
			LW_SD01_0.2_190212	ES1904669	<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
		18 Mar 2019	LW_SD01_190318	ES1908940	<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
		22 Oct 2021	0021_SD030_211022	ES2138639	<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
		05 Apr 2022	0021_SD030_220405	ES2212442	0.0482	0.0087	<0.0002	0.0569	0.0606	0.0579	-	-	0.0006	0.0011	-	0.0004	-	0.0005	-	<0.001	<0.0002	0.0002	<0.0002
		10 Oct 2022	0021_SD030_221010	ES2237106	<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
		18 Apr 2023	0021_SD030_230418	ES2313364	<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
		17 Oct 2023	0021_SD030_231017	ES2336399	<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
		09 Apr 2024	0021_SD030_240409	ES2411995	0.0024	0.0003	<0.0002	0.0027	0.0027	0.0027	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	-	<0.001	<0.0002	<0.0002	<0.0002
		25 Oct 2024	0021_SD030_241025	ES2435541	<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
		04 Apr 2025	0021_SD030_250404	ES2510622	<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
	0021_SD031	16 May 2018	LW_QC118_180516	ES1814324	<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
			LW_SD02_0.0_180516	ES1814324	<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
		12 Feb 2019	LW_SD02_0.0_190212	ES1905115	<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
		18 Mar 2019	LW_QC110_190319	ES1908940	<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
			LW_SD02_190319	ES1908940	<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
		22 Oct 2021	0021_SD031_211022	ES2138639	<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
		06 Apr 2022	0021_QC205_220406	293031	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	-	<0.0001	-	<0.0001	<0.0002	-	<0.0001	-	<0.0001	-	<0.0002	<0.0005	<0.0005	<0.0001
			0021_SD031_220406	ES2212442	<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
		10 Oct 2022	0021_SD031_221010	ES2237106	<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
		18 Apr 2023	0021_SD031_230418	ES2313364	<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
		17 Oct 2023	0021_QC101_231017	ES2336399	<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
			0021_QC201_231017	335876	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	-	<0.0001	-	<0.0001	<0.0002	-	<0.0001	-	<0.0001	-	<0.0002	<0.0005	<0.0005	<0.0001
			0021_SD031_231017	ES2336399	<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
		09 Apr 2024	0021_QC102_240409	ES2411995	<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
			0021_QC202_240409	348825	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	-	<0.0001	-	<0.0001	<0.0002	-	<0.0001	-	<0.0001	-	<0.0002	<0.0005	<0.0005	<0.0001
			0021_SD031_240409	ES2411995	<0.0002	<0.0002	<0.0002	<0.0002	0.0014	<0.0002	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	-	<0.001	<0.0002	<0.0002	<0.0002
		25 Oct 2024	0021_SD031_241025	ES2435541	<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
		07 Apr 2025	0021_SD031_250407	ES2510622	<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

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids							PFAS			
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorononanesulfonic acid (PFNS)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)
					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	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	0.005	0.0001	0.005	0.0001	0.005	0.0002	0.0002	0.0002	0.0001
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																			
Receptor	0021_SD032	14 May 2018	LW_SD03_0.0_180514	ES1814324	<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
		12 Feb 2019	LW_SD03_0.0_190212	ES1904669	<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
		18 Mar 2019	LW_SD03_190319	ES1908940	<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
		22 Oct 2021	0021_QC213_211022	281322	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	-	<0.0001	-	<0.0001	<0.0002	-	<0.0001	-	<0.0001	-	<0.0002	<0.0005	<0.0005	<0.0001
			0021_SD032_211022	ES2138639	<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
		26 Oct 2024	0021_SD032_241026	ES2435541	<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
	0021_SD080	12 Feb 2019	LM_QC101_190212	ES1904669	<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
			LM_QC201_190212	640876	<0.005	<0.005	<0.005	<0.005	<0.05	<0.01	-	-	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
			LM_SD01_0.0_190212	ES1904669	<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
		18 Mar 2019	LM_SD01_190318	ES1908940	<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
		21 Oct 2021	0021_SD080_211021	ES2138639	<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
		05 Apr 2022	0021_SD080_220405	ES2212442	<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
		10 Oct 2022	0021_SD080_221010	ES2237106	<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
		18 Apr 2023	0021_SD080_230418	ES2313364	<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
		17 Oct 2023	0021_SD080_231017	ES2336399	<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
		09 Apr 2024	0021_SD080_240409	ES2411995	<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
		25 Oct 2024	0021_QC114_241025	ES2435541	<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
			0021_QC214_241025	1156160	<0.005	<0.005	<0.005	<0.005	<0.05	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005
			0021_SD080_241025	ES2435541	<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
		04 Apr 2025	0021_QC141_250404	ES2510113	<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
			0021_QC241_250404	1210052	<0.005	<0.005	<0.005	<0.005	<0.05	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005
			0021_SD080_250404	ES2510622	<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
	0021_SD093	18 Mar 2019	LW_SD05_190318	ES1908940	<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
		22 Oct 2021	0021_SD093_211022	ES2138639	0.0003	<0.0002	<0.0002	0.0003	0.0003	0.0003	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	-	<0.001	<0.0002	<0.0002	<0.0002
		18 Apr 2023	0021_SD093_230418	ES2313364	<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
		17 Oct 2023	0021_SD093_231017	ES2336399	0.0003	<0.0002	<0.0002	0.0003	0.0003	0.0003	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	-	<0.001	<0.0002	<0.0002	<0.0002
		09 Apr 2024	0021_SD093_240409	ES2411995	<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
		25 Oct 2024	0021_SD093_241025	ES2435541	<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
		04 Apr 2025	0021_QC111_250404	ES2510113	<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
			0021_QC211_250404	1210052	<0.005	<0.005	<0.005	<0.005	<0.05	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	<0.005	<0.005	<0.005	<0.005
			0021_SD093_250404	ES2510622	<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

Statistics

Number of Results	83	83	83	83	83	79	7	3	83	83	3	83	5	83	2	83	83	83	83
Number of Detects	6	2	0	6	9	6	0	0	1	1	0	1	0	1	0	0	0	1	0
Minimum Concentration	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0002	<0.0001	<0.005	<0.0001	<0.0002	<0.005	<0.0001	<0.005	<0.0001	<0.005	<0.0002	<0.0002	0.0002	<0.0001
Minimum Detect	0.0002	0.0003	ND	0.0002	0.0002	0.0002	ND	ND	0.0006	0.0011	ND	0.0004	ND	0.0005	ND	ND	ND	0.0002	ND
Maximum Concentration	0.0482	0.0087	<0.005	0.0569	0.0606	0.0579	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Maximum Detect	0.0482	0.0087	ND	0.0569	0.0606	0.0579	ND	ND	0.0006	0.0011	ND	0.0004	ND	0.0005	ND	ND	ND	0.0002	ND
Average Concentration *	0.00086	0.00035	0.00024	0.00097	0.0024	0.0012	0.0011	0.0025	0.00025	0.00026	0.0025	0.00025	0.0025	0.00025	0.0025	0.0006	0.00025	0.00025	0.00024
Geometric Average *	0.00014	0.00013	0.00012	0.00014	0.00017	0.00015	0.00027	0.0025	0.00012	0.00012	0.0025	0.00012	0.0025	0.00012	0.0025	0.00051	0.00013	0.00013	0.00012
Median Concentration *	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.00005	0.0025	0.0001	0.0001	0.0025	0.0001	0.0025	0.0001	0.0025	0.0005	0.0001	0.0001	0.0001
Standard Deviation *	0.0053	0.0011	0.00058	0.0062	0.0088	0.0066	0.0013	0	0.00058	0.00058	0	0.00058	0	0.00058	0	0.00049	0.00057	0.00057	0.00058
Geometric Standard Deviation *	3	2.5	2.2	3.1	4.8	3.5	8.1	1	2.3	2.2	1	2.2	1	2.2	1	1.7	2.2	2.2	2.2
95% UCL (Student's-t) *	0.00183	0.00054752	0.00034721	0.00211	0.00401	0.00242	0.00206	0.0025	0.00035344	0.00036288	0.0025	0.00035083	0.0025	0.00035212	0.0025	0.00069091	0.00035655	0.00035771	0.00034721
Number of Env Standard Exceedances	10	7	5	5	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Env Standard Exceedances (Detects Only)	5	2	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Detects	7	2	0	7	11	8	0	0	1	1	0	1	0	1	0	0	0	1	0
% of Non-Detects	93	98	100	93	89	92	100	100	99	99	100	99	100	99	100	100	100	99	100
% of Detects at or above Env Standards	6	2	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Results Below Env Standards or Non-Detect	94	98	100	94	99	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

					- Perfluoroalkyl Carboxylic Acids						PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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	mg/kg
EQL					0.0001	0.0001	0.0002	0.0005	0.0002	0.0002	0.0005	0.0002	0.0005	0.0005	0.0002	0.0005	0.0002	0.0002	0.0001	0.0001	0.0002
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																	
Pathway	0021_SD029	11 Feb 2019	LM_SD04_0.0_190211	ES1904669	<0.0002	<0.0002	<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
			LM_SD04_0.2_190211	ES1904669	<0.0002	<0.0002	<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
		18 Mar 2019	LM_QC102_190318	ES1908940	<0.0002	<0.0002	<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
			LM_SD04_190318	ES1908940	<0.0002	<0.0002	<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
		22 Oct 2021	0021_SD029_211022	ES2138639	<0.0002	<0.0002	<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
		05 Apr 2022	0021_SD029_220405	ES2212442	<0.0002	<0.0002	<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
		11 Oct 2022	0021_SD029_221010	ES2237106	<0.0002	<0.0002	<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
		18 Apr 2023	0021_SD029_230418	ES2313364	<0.0002	<0.0002	<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
		17 Oct 2023	0021_SD029_231017	ES2336399	<0.0002	<0.0002	<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
		10 Apr 2024	0021_SD029_240410	ES2411995	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	0.0012	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
		26 Oct 2024	0021_SD029_241026	ES2435541	<0.0002	<0.0002	<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
		03 Apr 2025	0021_SD029_250403	ES2510622	<0.0002	<0.0002	<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
Receptor	0021_SD028	14 May 2018	LM_SD03_0.0_180514	ES1814324	<0.0002	<0.0002	<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
		21 Oct 2021	0021_SD028_211021	ES2138639	<0.0002	<0.0002	<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
		05 Apr 2022	0021_SD028_220405	ES2212442	<0.0002	<0.0002	<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
		10 Oct 2022	0021_SD028_221010	ES2237106	<0.0002	<0.0002	<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
		18 Apr 2023	0021_SD028_230418	ES2313364	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	0.0003	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
		17 Oct 2023	0021_SD028_231017	ES2336399	<0.0002	<0.0002	<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
		09 Apr 2024	0021_SD028_240409	ES2411995	<0.0002	<0.0002	<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
		25 Oct 2024	0021_SD028_241025	ES2435541	<0.0002	<0.0002	<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
		04 Apr 2025	0021_SD028_250404	ES2510622	<0.0002	<0.0002	<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
	0021_SD030	14 May 2018	LW_SD01_0.0_180514	ES1814324	<0.0002	<0.0002	<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
		12 Feb 2019	LW_QC208_190212	640876	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
			LW_SD01_0.0_190212	ES1904669	<0.0002	<0.0002	<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
			LW_SD01_0.2_190212	ES1904669	<0.0002	<0.0002	<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
		18 Mar 2019	LW_SD01_190318	ES1908940	<0.0002	<0.0002	<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
		22 Oct 2021	0021_SD030_211022	ES2138639	<0.0002	<0.0002	<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
		05 Apr 2022	0021_SD030_220405	ES2212442	0.0004	<0.0002	<0.0002	<0.0005	<0.0002	0.0003	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0002	<0.0005	<0.0005	<0.0005	<0.0005
		10 Oct 2022	0021_SD030_221010	ES2237106	<0.0002	<0.0002	<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
		18 Apr 2023	0021_SD030_230418	ES2313364	<0.0002	<0.0002	<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
		17 Oct 2023	0021_SD030_231017	ES2336399	<0.0002	<0.0002	<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
		09 Apr 2024	0021_SD030_240409	ES2411995	<0.0002	<0.0002	<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
		25 Oct 2024	0021_SD030_241025	ES2435541	<0.0002	<0.0002	<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
		04 Apr 2025	0021_SD030_250404	ES2510622	<0.0002	<0.0002	<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
	0021_SD031	16 May 2018	LW_QC118_180516	ES1814324	<0.0002	<0.0002	<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
			LW_SD02_0.0_180516	ES1814324	<0.0002	<0.0002	<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
		12 Feb 2019	LW_SD02_0.0_190212	ES1905115	<0.0002	<0.0002	<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
		18 Mar 2019	LW_QC110_190319	ES1908940	<0.0002	<0.0002	<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
			LW_SD02_190319	ES1908940	<0.0002	<0.0002	<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
		22 Oct 2021	0021_SD031_211022	ES2138639	<0.0002	<0.0002	<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
		06 Apr 2022	0021_QC205_220406	293031	<0.0001	<0.0001	<0.0002	<0.005	<0.0005	<0.0005	<0.001	<0.0002	<0.005	<0.001	<0.0002	<0.001	<0.001	<0.0002	<0.0001	<0.0001	<0.0002
			0021_SD031_220406	ES2212442	<0.0002	<0.0002	<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
		10 Oct 2022	0021_SD031_221010	ES2237106	<0.0002	<0.0002	<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
		18 Apr 2023	0021_SD031_230418	ES2313364	<0.0002	<0.0002	<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
		17 Oct 2023	0021_QC101_231017	ES2336399	<0.0002	<0.0002	<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
			0021_QC201_231017	335876	<0.0001	<0.0001	<0.0002	<0.005	<0.0005	<0.0005	<0.001	<0.0002	<0.005	<0.001	<0.0002	<0.001	<0.001	<0.0002	<0.0001	<0.0001	<0.0002
			0021_SD031_231017	ES2336399	<0.0002	<0.0002	<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
		09 Apr 2024	0021_QC102_240409	ES2411995	<0.0002	<0.0002	<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
			0021_QC202_240409	348825	<0.0001	<0.0001	<0.0002	<0.005	<0.0005	<0.0005	<0.001	<0.0002	<0.005	<0.001	<0.0002	<0.001	<0.001	<0.0002	<0.0001	<0.0001	<0.0002
			0021_SD031_240409	ES2411995	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	0.0014	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
		25 Oct 2024	0021_SD031_241025	ES2435541	<0.0002	<0.0002	<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
		07 Apr 2025	0021_SD031_250407	ES2510622	<0.0002	<0.0002	<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

					- Perfluoroalkyl Carboxylic Acids						PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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	mg/kg
EQL					0.0001	0.0001	0.0002	0.0005	0.0002	0.0002	0.0005	0.0002	0.0005	0.0005	0.0002	0.0005	0.0002	0.0002	0.0001	0.0001	0.0002
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																	
Receptor	0021_SD032	14 May 2018	LW_SD03_0.0_180514	ES1814324	<0.0002	<0.0002	<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
		12 Feb 2019	LW_SD03_0.0_190212	ES1904669	<0.0002	<0.0002	<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
		18 Mar 2019	LW_SD03_190319	ES1908940	<0.0002	<0.0002	<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
		22 Oct 2021	0021_QC213_211022	281322	<0.0001	<0.0001	<0.0002	<0.005	<0.0005	<0.0005	<0.001	<0.0002	<0.005	<0.001	<0.0002	<0.001	<0.001	<0.0002	<0.0001	<0.0001	<0.0002
			0021_SD032_211022	ES2138639	<0.0002	<0.0002	<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
		26 Oct 2024	0021_SD032_241026	ES2435541	<0.0002	<0.0002	<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
	0021_SD080	12 Feb 2019	LM_QC101_190212	ES1904669	<0.0002	<0.0002	<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
			LM_QC201_190212	640876	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
			LM_SD01_0.0_190212	ES1904669	<0.0002	<0.0002	<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
		18 Mar 2019	LM_SD01_190318	ES1908940	<0.0002	<0.0002	<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
		21 Oct 2021	0021_SD080_211021	ES2138639	<0.0002	<0.0002	<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
		05 Apr 2022	0021_SD080_220405	ES2212442	<0.0002	<0.0002	<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
		10 Oct 2022	0021_SD080_221010	ES2237106	<0.0002	<0.0002	<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
		18 Apr 2023	0021_SD080_230418	ES2313364	<0.0002	<0.0002	<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
		17 Oct 2023	0021_SD080_231017	ES2336399	<0.0002	<0.0002	<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
		09 Apr 2024	0021_SD080_240409	ES2411995	<0.0002	<0.0002	<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
		25 Oct 2024	0021_QC114_241025	ES2435541	<0.0002	<0.0002	<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
			0021_QC214_241025	1156160	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
			0021_SD080_241025	ES2435541	<0.0002	<0.0002	<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
		04 Apr 2025	0021_QC141_250404	ES2510113	<0.0002	<0.0002	<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
			0021_QC241_250404	1210052	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
			0021_SD080_250404	ES2510622	<0.0002	<0.0002	<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
	0021_SD093	18 Mar 2019	LW_SD05_190318	ES1908940	<0.0002	<0.0002	<0.0002	<0.0006[#1]	<0.0002	<0.0002	<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
		22 Oct 2021	0021_SD093_211022	ES2138639	<0.0002	<0.0002	<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
		18 Apr 2023	0021_SD093_230418	ES2313364	<0.0002	<0.0002	<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
		17 Oct 2023	0021_SD093_231017	ES2336399	<0.0002	<0.0002	<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
		09 Apr 2024	0021_SD093_240409	ES2411995	<0.0002	<0.0002	<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
		25 Oct 2024	0021_SD093_241025	ES2435541	<0.0002	<0.0002	<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
		04 Apr 2025	0021_QC111_250404	ES2510113	<0.0002	<0.0002	<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
			0021_QC211_250404	1210052	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
			0021_SD093_250404	ES2510622	<0.0002	<0.0002	<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

Statistics

Number of Results	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83
Number of Detects	1	0	0	0	0	2	0	0	2	0	0	0	1	0	0	0	0
Minimum Concentration	<0.0001	<0.0001	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0002	<0.0002	<0.0001	<0.0001	<0.0002
Minimum Detect	0.0004	ND	ND	ND	ND	0.0003	ND	ND	0.0012	ND	ND	ND	0.0002	ND	ND	ND	ND
Maximum Concentration	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
Maximum Detect	0.0004	ND	ND	ND	ND	0.0003	ND	ND	0.0014	ND	ND	ND	0.0002	ND	ND	ND	ND
Average Concentration *	0.00025	0.00024	0.00024	0.00049	0.00025	0.00026	0.0004	0.0004	0.00052	0.0004	0.0004	0.0004	0.00027	0.00038	0.00038	0.00053	0.00038
Geometric Average *	0.00012	0.00012	0.00012	0.00032	0.00013	0.00013	0.0003	0.00013	0.00033	0.0003	0.00013	0.0003	0.00013	0.00027	0.00027	0.00028	0.00027
Median Concentration *	0.0001	0.0001	0.0001	0.00025	0.0001	0.0001	0.00025	0.0001	0.00025	0.00025	0.0001	0.00025	0.0001	0.00025	0.00025	0.00025	0.00025
Standard Deviation *	0.00058	0.00058	0.00057	0.0007	0.00057	0.00057	0.00054	0.0012	0.00071	0.00054	0.0012	0.00054	0.00058	0.00054	0.00054	0.0011	0.00054
Geometric Standard Deviation *	2.2	2.2	2.2	2.1	2.2	2.2	1.8	2.6	2.1	1.8	2.6	1.8	2.3	1.8	2	2.3	1.8
95% UCL (Student's-t) *	0.00035083	0.00034721	0.00034949	0.00062307	0.00035655	0.00036128	0.00049645	0.00060937	0.00065017	0.00049645	0.00060937	0.00049645	0.00037021	0.00047718	0.00047502	0.00073474	0.00047718
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	1	0	0	0	0	2	0	0	2	0	0	0	1	0	0	0	0
% of Non-Detects	99	100	100	100	100	98	100	100	98	100	100	100	99	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 Reported Analyte LOR is higher than Requested Analyte LOR

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids						P			
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)
					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	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	0.005	0.0001	0.005	0.0001	0.0002	0.0002	0.0002	0.0001
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																		
Source	0021_SD002	20 Apr 2017	AB_SED02_0-0.1	ES1709644	0.147	0.0159	0.0028	0.163	0.175	0.168	-	-	<0.0002	0.0031	-	0.0025	-	0.0004	<0.001	<0.0002	<0.0002	0.0004
Source	0021_SD002	19 Oct 2021	0021_SD002_211019	ES2138639	0.546	0.112	0.0049	0.658	0.719	0.694	-	-	0.0035	0.0050	-	0.0092	-	0.0069	0.006	<0.0005[#1]	<0.0005[#1]	0.0014
Source	0021_SD002	05 Apr 2022	0021_QC201_220405	293031	0.11	0.011	0.0010	0.12	0.12	-	0.11	-	<0.0003	0.0008	-	0.0014	-	0.0003	<0.0006	<0.002	<0.002	<0.0003
Source	0021_SD002	05 Apr 2022	0021_SD002_220405	ES2212442	0.0483	0.0058	0.0007	0.0541	0.0582	0.0568	-	-	0.0002	<0.0002	-	0.0010	-	0.0004	<0.001	<0.0002	<0.0002	0.0002
Source	0021_SD002	13 Oct 2022	0021_QC201_221013	308187	0.36	0.054	0.0037	0.41	0.45	-	0.36	-	0.0017	0.0065	-	0.0057	-	0.0035	0.0021	<0.005	<0.005	0.0012
Source	0021_SD002	13 Oct 2022	0021_SD002_221013	ES2237106	0.507	0.0956	0.0041	0.603	0.649	0.625	-	-	0.0038	0.0054	-	0.0045	-	0.0055	<0.002[#1]	<0.0005[#1]	<0.0005[#1]	0.0011
Source	0021_SD002	20 Apr 2023	0021_QC108_230420	ES2313364	0.0836	0.0175	0.0010	0.101	0.109	0.105	-	-	0.0010	<0.0002	-	0.0019	-	0.0013	<0.001	<0.0002	<0.0002	0.0002
Source	0021_SD002	20 Apr 2023	0021_QC208_230420	321517	0.021	0.0051	0.0003	0.026	0.028	-	0.021	-	0.0003	0.0002	-	0.0005	-	0.0004	<0.0002	<0.0005	<0.0005	<0.0001
Source	0021_SD002	20 Apr 2023	0021_SD002_230420	ES2313364	0.0282	0.0061	0.0002	0.0343	0.0366	0.0355	-	-	0.0003	<0.0002	-	0.0007	-	0.0004	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD002	18 Oct 2023	0021_SD002_231018	ES2336399	0.103	0.0169	0.0004	0.120	0.136	0.122	-	-	<0.0002	0.0037	-	0.0012	-	0.0008	<0.001	<0.0002	0.0004	<0.0002
Source	0021_SD002	11 Apr 2024	0021_SD002_240411	ES2411995	0.105	0.0118	0.0009	0.117	0.122	0.119	-	-	0.0004	0.0003	-	0.0018	-	0.0007	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD002	25 Oct 2024	0021_SD002_241025	ES2435541	0.0106	0.0029	0.0002	0.0135	0.0140	0.0140	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD002	03 Apr 2025	0021_SD002_250403	ES2510622	0.0127	0.0023	<0.0002	0.0150	0.0154	0.0150	-	-	<0.0002	0.0002	-	0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD003	20 Apr 2017	AB_SED03_0-0.05	ES1709644	0.117	0.0195	0.0008	0.136	0.140	0.138	-	-	<0.0002	0.0010	-	0.0008	-	0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD003	19 Oct 2021	0021_SD003_211019	ES2138639	0.0081	0.0010	<0.0002	0.0091	0.0103	0.0103	-	-	0.0004	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD003	05 Apr 2022	0021_QC103_220405	ES2212442	0.0021	0.0002	<0.0002	0.0023	0.0023	0.0023	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD003	05 Apr 2022	0021_SD003_220405	ES2212442	0.0008	<0.0002	<0.0002	0.0008	0.0008	0.0008	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD003	13 Oct 2022	0021_SD003_221013	ES2237106	0.0108	0.0022	<0.0002	0.0130	0.0130	0.0130	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD003	20 Apr 2023	0021_SD003_230420	ES2313364	0.0046	0.0010	<0.0002	0.0056	0.0056	0.0056	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD003	18 Oct 2023	0021_SD003_231018	ES2336399	0.0157	0.0031	<0.0002	0.0188	0.0191	0.0191	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD003	11 Apr 2024	0021_SD003_240411	ES2411995	0.0078	0.0010	<0.0002	0.0088	0.0090	0.0088	-	-	<0.0002	0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD003	25 Oct 2024	0021_QC260_241025	1156160	<0.005	<0.005	<0.005	<0.005	<0.05	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Source	0021_SD003	25 Oct 2024	0021_SD003_241025	ES2435541	0.0040	0.0004	<0.0002	0.0044	0.0044	0.0044	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD003	03 Apr 2025	0021_SD003_250403	ES2510622	0.0056	0.0003	<0.0002	0.0059	0.0059	0.0059	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD004	13 Apr 2017	AB_SED04	ES1709064	0.0003	<0.0002	<0.0002	0.0003	0.0003	0.0003	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD004	13 Apr 2017	TNQA07	ES1709064	0.0003	<0.0002	<0.0002	0.0003	0.0003	0.0003	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD004	26 Oct 2021	0021_QC204_211026	281322	0.0013	<0.0001	<0.0001	0.0013	0.0013	-	0.0013	-	<0.0001	<0.0002	-	<0.0001	-	<0.0001	<0.0002	<0.0005	<0.0005	<0.0001
Source	0021_SD004	26 Oct 2021	0021_SD004_211026	ES2138639	0.0017	0.0002	<0.0002	0.0019	0.0021	0.0019	-	-	<0.0002	<0.0002	-	0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD004	06 Apr 2022	0021_SD004_220406	ES2212442	0.0029	0.0003	<0.0002	0.0032	0.0032	0.0032	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD004	14 Oct 2022	0021_SD004_221014	ES2237106	0.0008	<0.0002	<0.0002	0.0008	0.0008	0.0008	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD004	21 Apr 2023	0021_SD004_230421	ES2313364	0.0009	<0.0002	<0.0002	0.0009	0.0009	0.0009	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD004	19 Oct 2023	0021_QC113_231019	ES2336399	0.0021	0.0002	<0.0002	0.0023	0.0023	0.0023	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD004	19 Oct 2023	0021_QC213_231019	335876	0.0020	0.0002	<0.0001	0.0021	0.0021	-	0.0020	-	<0.0001	<0.0002	-	<0.0001	-	<0.0001	<0.0002	<0.0005	<0.005	<0.0001
Source	0021_SD004	19 Oct 2023	0021_SD004_231019	ES2336399	0.0024	0.0003	<0.0002	0.0027	0.0027	0.0027	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD004	12 Apr 2024	0021_SD004_240412	ES2411995	0.0018	<0.0002	<0.0002	0.0018	0.0018	0.0018	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD004	22 Oct 2024	0021_QC101_241022	ES2435078	0.0010	<0.0002	<0.0002	0.0010	0.0010	0.0010	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD004	22 Oct 2024	0021_QC201_241022	1154751	<0.005	<0.005	<0.005	<0.005	<0.05	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Source	0021_SD004	22 Oct 2024	0021_SD004_241022	ES2435078	0.0010	<0.0002	<0.0002	0.0010	0.0010	0.0010	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD004	02 Apr 2025	0021_SD004_250402	ES2510622	0.0008	<0.0002	<0.0002	0.0008	0.0008	0.0008	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD005	13 Apr 2017	AB_SED06_0-0.05	ES1709064	<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
Source	0021_SD005	20 Oct 2021	0021_SD005_211020	ES2138639	0.0010	<0.0002	<0.0002	0.0010	0.0024	0.0024	-	-	0.0014	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD005	06 Apr 2022	0021_SD005_220406	ES2212442	<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
Source	0021_SD005	14 Oct 2022	0021_SD005_221014	ES2237106	<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
Source	0021_SD005	21 Apr 2023	0021_SD005_230421	ES2313364	<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
Source	0021_SD005	19 Oct 2023	0021_SD005_231019	ES2336399	<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
Source	0021_SD005	12 Apr 2024	0021_QC115_240412	ES2411995	0.0013	0.0002	<0.0002	0.0015	0.0015	0.0015	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD005	12 Apr 2024	0021_QC215_240412	348825	0.0054	0.0016	<0.0001	0.0070	0.0077	-	0.0054	-	0.0002	<0.0002	-	0.0001	-	0.0002	<0.0002	<0.0005	<0.0005	<0.0001
Source	0021_SD005	12 Apr 2024	0021_SD005_240412	ES2411995	0.0005	<0.0002	<0.0002	0.0005	0.0005	0.0005	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD005	22 Oct 2024	0021_SD005_241022	ES2435078	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
Source	0021_SD005	02 Apr 2025	0021_SD005_250402	ES2510622	0.0010	<0.0002	<0.0002	0.0010	0.0010	0.0010	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD007	11 Apr 2017	B_SED02_0-0.1	ES1708884	0.0024	0.0008	<0.0002	0.0032	0.0032	0.0032	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD007	20 Oct 2021	0021_QC104_211020	ES2138639	0.0018	0.0008	<0.0002	0.0026	0.0044	0.0044	-	-	0.0018	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD007	20 Oct 2021	0021_SD007_211020	ES2138639	0.0030	0.0011	<0.0002	0.0041	0.0066	0.0066	-	-	0.0022	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD007	07 Apr 2022	0021_SD007_220407	ES2212442	0.0142	0.0019	<0.0002	0.0161	0.0180	0.0180	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD007	12 Oct 2022	0021_SD007_221012	ES2237106	0.0238	0.0024	<0.0002	0.0262	0.0277	0.0277	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD007	20 Apr 2023	0021_QC114_230420	ES2313364	0.0113	0.0017	<0.0002	0.0130	0.0149	0.0145	-	-	0.0011	<0.0002	-	0.0004	-	<0.0002	<0.001	<0.0002	<0.0002	0.0002
Source	0021_SD007	20 Apr 2023	0021_QC214_230420	321517	0.018	0.0015	<0.0001	0.019	0.02	-	0.018	-	<0.0001	<0.0002	-	0.0002	-	<0.0001	<0.0002	<0.0005	<0.0005	<0.0001
Source	0021_SD007	20 Apr 2023	0021_SD007_230420	ES2313364	0.0156	0.0022	<0.0002	0.0178	0.0178	0.0178	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD007	18 Oct 2023	0021_SD007_231018	ES2336399	0.0209	0.0022	<0.0002	0.0231	0.0245	0.0245	-	-	0.0005	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD007	10 Apr 2024	0021_SD007_240410	ES2411995	0.0074	0.0009	<0.0002	0.0083	0.0121	0.0113	-	-	<0.0002	<0.0002	-	0.0008	-	<0.0002	0.003	<0.0002	<0.0002	<0.0002
Source	0021_SD007	24 Oct 2024	0021_SD007_241024	ES2435541	0.0042	0.0004	<0.0002	0.0046	0.0046	0.0046	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD012	13 Apr 2017	DC_SED01_0-0.1	ES1709064	0.0194	0.0015	<0.0002	0.0209	0.0209	0.0209	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD012	20 Oct 2021	0021_SD012_211020	ES2138639	0.0067	0.0009	<0.0002	0.0076	0.0076	0.0076	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids						P			
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)
					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	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	0.005	0.0001	0.005	0.0001	0.0002	0.0002	0.0002	0.0001
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																		
Source	0021_SD012	06 Apr 2022	0021_SD012_220406	ES2212442	0.0017	0.0004	<0.0002	0.0021	0.0021	0.0021	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD012	14 Oct 2022	0021_SD012_221014	ES2237106	0.0182	0.0017	<0.0002	0.0199	0.0199	0.0199	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD012	21 Apr 2023	0021_SD012_230421	ES2313364	0.0008	0.0002	<0.0002	0.0010	0.0010	0.0010	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD012	19 Oct 2023	0021_SD012_231019	ES2336399	0.0010	0.0011	<0.0002	0.0021	0.0021	0.0021	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD012	12 Apr 2024	0021_SD012_240412	ES2411995	<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
Source	0021_SD012	22 Oct 2024	0021_SD012_241022	ES2435078	0.0051	0.0014	<0.0002	0.0065	0.0065	0.0065	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD012	02 Apr 2025	0021_SD012_250402	ES2510622	<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
Source	0021_SD013	13 Apr 2017	DC_SED02_0-0.1	ES1709064	0.0312	0.0026	0.0002	0.0338	0.0344	0.0340	-	-	<0.0002	<0.0002	-	0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD013	20 Oct 2021	0021_SD013_211020	ES2138639	0.0109	0.0080	0.0003	0.0189	0.0199	0.0195	-	-	<0.0002	<0.0002	-	0.0002	-	0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD013	06 Apr 2022	0021_QC208_220406	293031	0.012	0.0061	0.0003	0.019	0.02	-	0.013	-	<0.0001	<0.0002	-	0.0004	-	0.0002	<0.0002	<0.0005	<0.0005	0.0001
Source	0021_SD013	06 Apr 2022	0021_SD013_220406	ES2212442	0.0220	0.0024	<0.0002	0.0244	0.0252	0.0248	-	-	<0.0002	<0.0002	-	0.0004	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD013	14 Oct 2022	0021_SD013_221014	ES2237106	0.0403	0.0093	0.0007	0.0496	0.0523	0.0514	-	-	<0.0002	<0.0002	-	0.0009	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD013	21 Apr 2023	0021_SD013_230421	ES2313364	0.0364	0.0518	0.0024	0.0882	0.102	0.0954	-	-	0.0007	0.0006	-	0.0034	-	0.0021	<0.001	<0.0002	<0.0002	0.0006
Source	0021_SD013	19 Oct 2023	0021_SD013_231019	ES2336399	0.120	0.0126	0.0004	0.133	0.143	0.134	-	-	0.0007	0.0051	-	0.0009	-	0.0006	<0.001	0.0004	0.0003	<0.0002
Source	0021_SD013	12 Apr 2024	0021_QC113_240412	ES2411995	0.0233	0.0083	0.0004	0.0316	0.0349	0.0336	-	-	0.0004	<0.0002	-	0.0005	-	0.0008	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD013	12 Apr 2024	0021_QC213_240412	348825	0.019	0.0090	0.0007	0.028	0.032	-	0.019	-	0.0004	<0.0002	-	0.0008	-	0.0005	0.0004	<0.0005	<0.0005	0.0002
Source	0021_SD013	12 Apr 2024	0021_SD013_240412	ES2411995	0.0124	0.0063	0.0002	0.0187	0.0208	0.0202	-	-	0.0004	<0.0002	-	0.0002	-	0.0004	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD013	22 Oct 2024	0021_SD013_241022	ES2435078	0.0129	0.0041	0.0002	0.0170	0.0177	0.0174	-	-	<0.0002	<0.0002	-	0.0003	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD013	02 Apr 2025	0021_SD013_250402	ES2510622	0.0011	<0.0002	<0.0002	0.0011	0.0011	0.0011	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD110	20 Oct 2021	0021_QC206_211020	281322	0.0040	0.0005	<0.0001	0.0044	0.0044	-	0.0040	-	<0.0001	<0.0002	-	<0.0001	-	<0.0001	<0.0002	<0.0005	<0.0005	<0.0001
Source	0021_SD110	20 Oct 2021	0021_SD110_211020	ES2138639	0.0013	<0.0002	<0.0002	0.0013	0.0013	0.0013	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD110	06 Apr 2022	0021_SD110_220406	ES2212442	0.0020	0.0002	<0.0002	0.0022	0.0022	0.0022	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD110	14 Oct 2022	0021_SD110_221014	ES2237106	0.0003	<0.0002	<0.0002	0.0003	0.0003	0.0003	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD110	21 Apr 2023	0021_SD110_230421	ES2313364	0.0009	0.0002	<0.0002	0.0011	0.0011	0.0011	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD110	19 Oct 2023	0021_SD110_231019	ES2336399	0.0048	0.0018	<0.0002	0.0066	0.0080	0.0080	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD110	12 Apr 2024	0021_SD110_240412	ES2411995	0.0005	0.0046	0.0005	0.0051	0.0060	0.0056	-	-	<0.0002	<0.0002	-	0.0002	-	0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD110	22 Oct 2024	0021_SD110_241022	ES2435078	0.0018	0.0004	<0.0002	0.0022	0.0024	0.0022	-	-	<0.0002	0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Source	0021_SD110	02 Apr 2025	0021_SD110_250402	ES2510622	0.0036	0.0004	<0.0002	0.0040	0.0040	0.0040	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD006	12 Apr 2017	B_SED01_0.3-0.4	ES1709064	0.0255	0.0043	0.0004	0.0298	0.0307	0.0302	-	-	<0.0002	<0.0002	-	0.0005	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD006	20 Oct 2021	0021_SD006_211020	ES2138639	0.791	0.0684	0.0028	0.859	0.910	0.874	-	-	0.0017	0.0204	-	0.0065	-	0.0032	0.002	<0.0002	0.0006	0.0008
Pathway	0021_SD006	12 Oct 2022	0021_SD006_221012	ES2237106	0.500	0.0533	0.0022	0.553	0.597	0.562	-	-	0.0018	0.0170	-	0.0051	-	0.0022	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD006	19 Apr 2023	0021_SD006_230419	ES2313364	0.0910	0.0109	0.0005	0.102	0.115	0.104	-	-	<0.0002	0.0088	-	0.0011	-	0.0003	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD006	18 Oct 2023	0021_SD006_231018	ES2336399	0.991	0.112	0.0072	1.10	1.18	1.14	-	-	0.0021	0.0193	-	0.0124	-	0.0039	<0.002[#1]	<0.0005[#1]	<0.0005[#1]	0.0018
Pathway	0021_SD006	10 Apr 2024	0021_SD006_240410	ES2411995	0.131	0.0173	0.0004	0.148	0.167	0.156	-	-	0.0003	0.0082	-	0.0006	-	0.0006	0.003	<0.0002	0.0004	0.0004
Pathway	0021_SD006	25 Oct 2024	0021_SD006_241025	ES2435541	0.262	0.0391	0.0014	0.301	0.335	0.317	-	-	0.0027	0.0106	-	0.0027	-	0.0024	0.003	<0.0002	0.0004	0.0007
Pathway	0021_SD006	30 Jan 2025	0021_SD006_250130	ES2503552	0.511	0.0506	0.0026	0.562	0.602	0.567	-	-	0.0017	0.0249	-	0.0047	-	0.0034	<0.001	0.0003	0.0004	0.0005
Pathway	0021_SD006	02 Apr 2025	0021_SD006_250404	ES2510622	0.150	0.0229	0.0008	0.173	0.194	0.179	-	-	0.0006	0.0093	-	0.0014	-	0.0005	<0.001	<0.0002	<0.0002	0.0006
Pathway	0021_SD014	13 Apr 2017	DC_SED03_0-0.1	ES1709064	0.0025	<0.0002	<0.0002	0.0025	0.0025	0.0025	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD014	20 Oct 2021	0021_QC106_211020	ES2138639	0.0157	0.0017	<0.0002	0.0174	0.0183	0.0179	-	-	<0.0002	<0.0002	-	0.0004	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD014	20 Oct 2021	0021_SD014_211020	ES2138639	0.0177	0.0016	<0.0002	0.0193	0.0206	0.0202	-	-	0.0004	<0.0002	-	0.0004	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD014	06 Apr 2022	0021_QC108_220406	ES2212442	0.0007	0.0002	<0.0002	0.0009	0.0009	0.0009	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD014	06 Apr 2022	0021_SD014_220406	ES2212442	0.0005	0.0005	<0.0002	0.0010	0.0010	0.0010	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD014	14 Oct 2022	0021_QC215_221014	308187	0.0002	0.0004	<0.0001	0.0006	0.0006	-	0.0002	-	<0.0001	<0.0002	-	<0.0001	-	<0.0001	<0.0002	<0.0005	<0.002	<0.0001
Pathway	0021_SD014	14 Oct 2022	0021_SD014_221014	ES2237106	<0.0002	0.0007	<0.0002	0.0007	0.0007	0.0007	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD014	21 Apr 2023	0021_SD014_230421	ES2313364	0.0020	<0.0002	<0.0002	0.0020	0.0020	0.0020	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD014	19 Oct 2023	0021_SD014_231019	ES2336399	<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
Pathway	0021_SD014	22 Oct 2024	0021_SD014_241022	ES2435078	0.0443	0.0029	<0.0002	0.0472	0.0474	0.0474	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD014	23 Oct 2024	0021_QC102_241022	ES2435078	0.0691	0.0027	0.0002	0.0718	0.0731	0.0722	-	-	<0.0002	0.0006	-	0.0003	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD014	23 Oct 2024	0021_QC202_241022	ES2435078	0.0384	0.0027	<0.0002	0.0411	0.0421	0.0413	-	-	<0.0002	0.0005	-	0.0003	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD014	02 Apr 2025	0021_SD014_250402	ES2510622	<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
Pathway	0021_SD036	23 Mar 2018	MC_SD02_0.0_180323	ES1809241	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
Pathway	0021_SD036	11 Oct 2022	0021_SD036_221011	ES2237106	0.0137	0.0014	<0.0002	0.0151	0.0161	0.0151	-	-	<0.0002	0.0010	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD036	18 Apr 2023	0021_SD036_230418	ES2313364	0.0018	0.0003	<0.0002	0.0021	0.0021	0.0021	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD036	17 Oct 2023	0021_SD036_231017	ES2336399	0.0014	0.0002	<0.0002	0.0016	0.0016	0.0016	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD036	09 Apr 2024	0021_SD036_240409	ES2411995	0.446	0.0153	0.0012	0.461	0.484	0.467	-	-	0.0003	0.0109	-	0.0040	-	0.0003	0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD036	28 Oct 2024	0021_SD036_241028	ES2435541	0.0040	0.0006	<0.0002	0.0046	0.0049	0.0046	-	-	<0.0002	0.0003	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD036	01 Apr 2025	0021_SD036_250401	ES2510622	<0.0002	0.0004	<0.0002	0.0004	0.0004	0.0004	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD037	23 Mar 2018	MC_SD03_0.0_180323	ES1809241	<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
Pathway	0021_SD037	05 May 2018	MC_SD03_0.0_180501	ES1812871	<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
Pathway	0021_SD037	11 Oct 2022	0021_SD037_221011	ES2237106	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
Pathway	0021_SD037	18 Apr 2023	0021_SD037_230418	ES2313364	0.0010	<0.0002	<0.0002	0.0010	0.0010	0.0010	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD037	17 Oct 2023	0021_SD037_231017	ES2336399	<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
Pathway	0021_SD037	09 Apr 2024	0021_SD037_240409	ES2411995	<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

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids						P			
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)
					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	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	0.005	0.0001	0.005	0.0001	0.0002	0.0002	0.0002	0.0001
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																		
Pathway	0021_SD037	23 Oct 2024	0021_SD037_241023	ES2435078	0.0005	<0.0002	<0.0002	0.0005	0.0005	0.0005	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD037	03 Apr 2025	0021_SD037_250401	ES2510622	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
Pathway	0021_SD040	28 Mar 2018	MC_QC110_180328	ES1809328	<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
Pathway	0021_SD040	05 Apr 2018	MC_SD06_0.0_180405	ES1810551	0.0044	0.0023	<0.0002	0.0067	0.0069	0.0067	-	-	<0.0002	<0.0002	-	0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD040	12 Oct 2022	0021_SD040_221012	ES2237106	0.0022	0.0002	<0.0002	0.0024	0.0024	0.0024	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD040	19 Apr 2023	0021_SD040_230419	ES2313364	0.0005	<0.0002	<0.0002	0.0005	0.0005	0.0005	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD040	18 Oct 2023	0021_SD040_231017	ES2336399	0.0003	<0.0002	<0.0002	0.0003	0.0003	0.0003	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD040	10 Apr 2024	0021_SD040_240410	ES2411995	0.0106	0.0008	<0.0002	0.0114	0.0120	0.0114	-	-	<0.0002	0.0004	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD040	25 Oct 2024	0021_SD040_241025	ES2435541	0.0047	0.0008	<0.0002	0.0055	0.0055	0.0055	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD040	03 Apr 2025	0021_SD040_250403	ES2510622	0.0023	0.0018	<0.0002	0.0041	0.0041	0.0041	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD111	11 Oct 2022	0021_SD111_221011	ES2237106	0.0046	0.0004	<0.0002	0.0050	0.0050	0.0050	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD111	17 Oct 2023	0021_QC100_231017	ES2336399	0.0111	0.0034	<0.0002	0.0145	0.0153	0.0149	-	-	0.0004	<0.0002	-	0.0004	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD111	17 Oct 2023	0021_QC200_231017	335876	0.0098	0.0022	<0.0003	0.012	0.012	-	0.0098	-	<0.0003	<0.0006	-	<0.0003	-	<0.0003	<0.0006	<0.002	<0.002	<0.0003
Pathway	0021_SD111	17 Oct 2023	0021_SD111_231017	ES2336399	0.0042	0.0012	<0.0002	0.0054	0.0056	0.0056	-	-	0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD111	09 Apr 2024	0021_SD111_240409	ES2411995	0.170	0.0181	0.0005	0.188	0.196	0.190	-	-	0.0005	0.0021	-	0.0020	-	0.0010	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD111	23 Oct 2024	0021_SD111_241023	ES2435078	0.125	0.0223	0.0006	0.147	0.156	0.148	-	-	0.0006	0.0037	-	0.0026	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD111	29 Jan 2025	0021_SD111_250129	ES2503552	0.0584	0.0159	0.0005	0.0743	0.0817	0.0755	-	-	0.0004	0.0020	-	0.0013	-	0.0007	<0.001	<0.0002	<0.0002	<0.0002
Pathway	0021_SD111	01 Apr 2025	0021_SD111_250401	ES2510622	0.104	0.0143	0.0006	0.118	0.132	0.125	-	-	0.0002	0.0032	-	0.0016	-	0.0004	0.001	<0.0002	<0.0002	0.0002
Receptor	0021_SD035	20 Mar 2018	MC_SD01_0.0_180320	ES1808818	0.0003	<0.0002	<0.0002	0.0003	0.0003	0.0003	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Receptor	0021_SD035	20 Mar 2018	MC_SD01_0.3_180320	ES1814922	0.0007	<0.0002	<0.0002	0.0007	-	0.0007	-	-	<0.0002	-	-	-	-	-	<0.001	-	-	<0.0002
Receptor	0021_SD035	01 May 2018	MC_SD01_0.0_180501	ES1812871	0.0011	0.0005	<0.0002	0.0016	0.0016	0.0016	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Receptor	0021_SD035	12 Oct 2022	0021_SD035_221012	ES2237106	0.0574	0.0034	<0.0002	0.0608	0.0608	0.0608	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Receptor	0021_SD035	18 Apr 2023	0021_SD035_230418	ES2313364	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
Receptor	0021_SD035	17 Oct 2023	0021_SD035_231017	ES2336399	0.0014	<0.0002	<0.0002	0.0014	0.0014	0.0014	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Receptor	0021_SD035	09 Apr 2024	0021_SD035_240409	ES2411995	0.0322	0.0044	<0.0002	0.0366	0.0386	0.0366	-	-	<0.0002	0.0011	-	0.0005	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Receptor	0021_SD035	23 Oct 2024	0021_SD035_241023	ES2435078	0.0401	0.0018	0.0003	0.0419	0.0491	0.0442	-	-	<0.0002	0.0032	-	<0.0002	-	<0.0002	0.002	<0.0002	<0.0002	<0.0002
Receptor	0021_SD035	29 Jan 2025	0021_SD035_250129	ES2503552	0.0028	0.0003	<0.0002	0.0031	0.0031	0.0031	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Receptor	0021_SD035	01 Apr 2025	0021_SD035_250401	ES2510622	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
Receptor	0021_SD043	28 Mar 2018	MC_SD09_0.0_180328	ES1809328	<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
Receptor	0021_SD043	23 Oct 2024	0021_SD043_241023	ES2435078	<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
Receptor	0021_SD043	03 Apr 2025	0021_SD043_250403	ES2510622	<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
Receptor	0021_SD044	20 Mar 2018	MC_SD10_0.0_180320	ES1808818	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
Receptor	0021_SD044	20 Mar 2018	MC_SD10_0.3_180320	ES1814922	0.0002	<0.0002	<0.0002	0.0002	-	0.0002	-	-	<0.0002	-	-	-	-	-	<0.001	-	-	<0.0002
Receptor	0021_SD044	28 Mar 2018	MC_SD10_0.0_180328	ES1814922	<0.0002	<0.0002	<0.0002	<0.0002	-	<0.0002	-	-	<0.0002	-	-	-	-	-	<0.001	-	-	<0.0002
Receptor	0021_SD044	28 Mar 2018	MC_SD10_0.2_180328	ES1814922	<0.0002	<0.0002	<0.0002	<0.0002	-	<0.0002	-	-	<0.0002	-	-	-	-	-	<0.001	-	-	<0.0002
Receptor	0021_SD044	12 Oct 2022	0021_SD044_221012	ES2237106	<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
Receptor	0021_SD044	18 Apr 2023	0021_SD044_230418	ES2313364	0.0003	<0.0002	<0.0002	0.0003	0.0003	0.0003	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Receptor	0021_SD044	17 Oct 2023	0021_QC106_231017	ES2336399	<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
Receptor	0021_SD044	17 Oct 2023	0021_QC206_231017	335876	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	-	<0.0001	-	<0.0001	<0.0002	-	<0.0001	-	<0.0001	<0.0002	<0.0005	<0.0005	<0.0001
Receptor	0021_SD044	17 Oct 2023	0021_SD044_231017	ES2336399	<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
Receptor	0021_SD044	09 Apr 2024	0021_SD044_240409	ES2411995	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
Receptor	0021_SD044	23 Oct 2024	0021_QC107_241023	ES2435078	<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
Receptor	0021_SD044	23 Oct 2024	0021_QC207_241023	1154751	<0.005	<0.005	<0.005	<0.005	<0.05	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Receptor	0021_SD044	23 Oct 2024	0021_SD044_241023	ES2435078	<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
Receptor	0021_SD044	29 Jan 2025	0021_SD044_250129	ES2503552	0.0003	0.0002	<0.0002	0.0005	0.0005	0.0005	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Receptor	0021_SD044	01 Apr 2025	0021_QC104_250401	ES2510113	0.0005	<0.0002	<0.0002	0.0005	0.0005	0.0005	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Receptor	0021_SD044	01 Apr 2025	0021_QC204_250401	1210052	<0.005	<0.005	<0.005	<0.005	<0.05	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Receptor	0021_SD044	01 Apr 2025	0021_SD044_250401	ES2510622	<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

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids						P			
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)
	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	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	0.005	0.0001	0.005	0.0001	0.0002	0.0002	0.0002	0.0001
Statistics																		
Number of Results	174	174	174	174	170	161	17	4	174	170	4	170	4	170	174	170	170	174
Number of Detects	142	109	40	145	143	133	12	0	35	34	0	51	0	33	10	2	6	17
Minimum Concentration	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0002	<0.0001	<0.005	<0.0001	0.0002	<0.005	0.0001	<0.005	<0.0001	<0.0002	<0.0002	<0.0002	0.0001
Minimum Detect	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	ND	0.0002	0.0002	ND	0.0001	ND	0.0002	0.0004	0.0003	0.0003	0.0001
Maximum Concentration	0.991	0.112	0.0072	1.1	1.18	1.14	0.36	<0.005	<0.005	0.0249	<0.005	0.0124	<0.005	0.0069	0.006	<0.005	<0.005	<0.005
Maximum Detect	0.991	0.112	0.0072	1.1	1.18	1.14	0.36	ND	0.0038	0.0249	ND	0.0124	ND	0.0069	0.006	0.0004	0.0006	0.0018
Average Concentration *	0.044	0.0061	0.00041	0.05	0.055	0.051	0.034	0.0025	0.00034	0.0012	0.0025	0.00066	0.0025	0.0004	0.00064	0.0002	0.00022	0.0002
Geometric Average *	0.0031	0.00074	0.00017	0.0036	0.0042	0.0035	0.005	0.0025	0.00015	0.0002	0.0025	0.0002	0.0025	0.00016	0.00052	0.00012	0.00013	0.00012
Median Concentration *	0.00245	0.00045	0.0001	0.00255	0.00425	0.0031	0.004	0.0025	0.0001	0.0001	0.0025	0.0001	0.0025	0.0001	0.0005	0.0001	0.0001	0.0001
Standard Deviation *	0.13	0.017	0.00092	0.15	0.16	0.15	0.088	0	0.00065	0.0036	0	0.0016	0	0.00094	0.00064	0.00042	0.00046	0.00041
Geometric Standard Deviation *	12	7.5	2.9	12	12	12	8.2	1	2.7	4.3	1	3.5	1	2.8	1.8	1.9	2.1	2.1
95% UCL (Student's-t) *	0.0601	0.00823	0.00053081	0.068	0.0753	0.0711	0.071	0.0025	0.00041803	0.00165	0.0025	0.0008556	0.0025	0.00051876	0.00071561	0.0002484	0.00027951	0.00025653
Number of Env Standard Exceedances	142	100	17	141	87	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Env Standard Exceedances (Detects Only)	138	96	13	141	83	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Detects	82	63	23	83	84	83	71	0	20	20	0	30	0	19	6	1	4	10
% of Non-Detects	18	37	77	17	16	17	29	100	80	80	100	70	100	81	94	99	96	90
% of Detects at or above Env Standards	79	55	7	81	49	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Results Below Env Standards or Non-Detect	21	45	93	19	51	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

					FAS - Perfluoroalkyl Carboxylic Acids						PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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	mg/kg
EQL					0.0001	0.0001	0.0002	0.0005	0.0002	0.0002	0.0005	0.0002	0.0005	0.0005	0.0002	0.0005	0.0002	0.0002	0.0001	0.0001	0.0002
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																	
Source	0021_SD002	20 Apr 2017	AB_SED02_0-0.1	ES1709644	0.0019	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	0.0003	<0.0005	<0.0005	<0.0002	<0.0005	0.0008	<0.0005	<0.0005	<0.0005	<0.0005
Source	0021_SD002	19 Oct 2021	0021_SD002_211019	ES2138639	0.0115	<0.0005#1	0.0086	<0.0012#1	<0.0005#1	<0.0005#1	<0.0012#1	<0.0005#1	<0.0012#1	<0.0012#1	<0.0005#1	<0.0012#1	0.0036	<0.0005	<0.0005	<0.0005	<0.0005
Source	0021_SD002	05 Apr 2022	0021_QC201_220405	293031	0.0008	<0.0003	<0.0006	<0.02	<0.002	<0.002	<0.003	<0.0006	<0.02	<0.003	<0.0006	<0.003	<0.003	<0.0006	<0.0003	<0.0003	<0.0006
Source	0021_SD002	05 Apr 2022	0021_SD002_220405	ES2212442	0.0013	<0.0002	0.0003	<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
Source	0021_SD002	13 Oct 2022	0021_QC201_221013	308187	0.0072	<0.001	0.0042	<0.05	<0.005	<0.005	<0.01	<0.002	<0.05	<0.01	<0.002	<0.01	<0.01	<0.002	<0.001	<0.001	<0.002
Source	0021_SD002	13 Oct 2022	0021_SD002_221013	ES2237106	0.0096	<0.0005#1	0.0035	<0.0012#1	<0.0005#1	<0.0005#1	<0.0012#1	<0.0005#1	<0.0012#1	<0.0012#1	<0.0005#1	<0.0012#1	0.0088	<0.0005	<0.0005	<0.0005	<0.0005
Source	0021_SD002	20 Apr 2023	0021_QC108_230420	ES2313364	0.0014	<0.0002	0.0007	<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
Source	0021_SD002	20 Apr 2023	0021_QC208_230420	321517	0.0005	<0.0001	0.0002	<0.005	<0.0005	<0.0005	<0.001	<0.0002	<0.005	<0.001	<0.0002	<0.001	<0.001	<0.0002	<0.0001	<0.0001	<0.0002
Source	0021_SD002	20 Apr 2023	0021_SD002_230420	ES2313364	0.0005	<0.0002	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
Source	0021_SD002	18 Oct 2023	0021_SD002_231018	ES2336399	0.0010	<0.0002	0.0005	<0.0005	<0.0002	0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0077	<0.0005	<0.0005	<0.0005	<0.0005
Source	0021_SD002	11 Apr 2024	0021_SD002_240411	ES2411995	0.0010	<0.0002	0.0003	<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
Source	0021_SD002	25 Oct 2024	0021_SD002_241025	ES2435541	0.0003	<0.0002	<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
Source	0021_SD002	03 Apr 2025	0021_SD002_250403	ES2510622	<0.0002	<0.0002	<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
Source	0021_SD003	20 Apr 2017	AB_SED03_0-0.05	ES1709644	0.0006	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0004	<0.0005	<0.0005	<0.0005	<0.0005
Source	0021_SD003	19 Oct 2021	0021_SD003_211019	ES2138639	0.0005	<0.0002	0.0003	<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
Source	0021_SD003	05 Apr 2022	0021_QC103_220405	ES2212442	<0.0002	<0.0002	<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
Source	0021_SD003	05 Apr 2022	0021_SD003_220405	ES2212442	<0.0002	<0.0002	<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
Source	0021_SD003	13 Oct 2022	0021_SD003_221013	ES2237106	<0.0002	<0.0002	<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
Source	0021_SD003	20 Apr 2023	0021_SD003_230420	ES2313364	<0.0002	<0.0002	<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
Source	0021_SD003	18 Oct 2023	0021_SD003_231018	ES2336399	0.0003	<0.0002	<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
Source	0021_SD003	11 Apr 2024	0021_SD003_240411	ES2411995	<0.0002	<0.0002	<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
Source	0021_SD003	25 Oct 2024	0021_QC260_241025	1156160	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
Source	0021_SD003	25 Oct 2024	0021_SD003_241025	ES2435541	<0.0002	<0.0002	<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
Source	0021_SD003	03 Apr 2025	0021_SD003_250403	ES2510622	<0.0002	<0.0002	<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
Source	0021_SD004	13 Apr 2017	AB_SED04	ES1709064	<0.0002	<0.0002	<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
Source	0021_SD004	13 Apr 2017	TNQA07	ES1709064	<0.0002	<0.0002	<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
Source	0021_SD004	26 Oct 2021	0021_QC204_211026	281322	<0.0001	<0.0001	<0.0002	<0.005	<0.0005	<0.0005	<0.001	<0.0002	<0.005	<0.001	<0.0002	<0.001	<0.001	<0.0002	<0.0001	<0.0001	<0.0002
Source	0021_SD004	26 Oct 2021	0021_SD004_211026	ES2138639	<0.0002	<0.0002	<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
Source	0021_SD004	06 Apr 2022	0021_SD004_220406	ES2212442	<0.0002	<0.0002	<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
Source	0021_SD004	14 Oct 2022	0021_SD004_221014	ES2237106	<0.0002	<0.0002	<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
Source	0021_SD004	21 Apr 2023	0021_SD004_230421	ES2313364	<0.0002	<0.0002	<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
Source	0021_SD004	19 Oct 2023	0021_QC113_231019	ES2336399	<0.0002	<0.0002	<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
Source	0021_SD004	19 Oct 2023	0021_QC213_231019	335876	<0.0001	<0.0001	<0.0002	<0.005	<0.0005	<0.0005	<0.001	<0.0002	<0.005	<0.001	<0.0002	<0.001	<0.001	<0.0002	<0.0001	<0.0001	<0.0002
Source	0021_SD004	19 Oct 2023	0021_SD004_231019	ES2336399	<0.0002	<0.0002	<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
Source	0021_SD004	12 Apr 2024	0021_SD004_240412	ES2411995	<0.0002	<0.0002	<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
Source	0021_SD004	22 Oct 2024	0021_QC101_241022	ES2435078	<0.0002	<0.0002	<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
Source	0021_SD004	22 Oct 2024	0021_QC201_241022	1154751	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
Source	0021_SD004	22 Oct 2024	0021_SD004_241022	ES2435078	<0.0002	<0.0002	<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
Source	0021_SD004	02 Apr 2025	0021_SD004_250402	ES2510622	<0.0002	<0.0002	<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
Source	0021_SD005	13 Apr 2017	AB_SED06_0-0.05	ES1709064	<0.0002	<0.0002	<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
Source	0021_SD005	20 Oct 2021	0021_SD005_211020	ES2138639	<0.0002	<0.0002	<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
Source	0021_SD005	06 Apr 2022	0021_SD005_220406	ES2212442	<0.0002	<0.0002	<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
Source	0021_SD005	14 Oct 2022	0021_SD005_221014	ES2237106	<0.0002	<0.0002	<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
Source	0021_SD005	21 Apr 2023	0021_SD005_230421	ES2313364	<0.0002	<0.0002	<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
Source	0021_SD005	19 Oct 2023	0021_SD005_231019	ES2336399	<0.0002	<0.0002	<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
Source	0021_SD005	12 Apr 2024	0021_QC115_240412	ES2411995	<0.0002	<0.0002	<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
Source	0021_SD005	12 Apr 2024	0021_QC215_240412	348825	0.0002	<0.0001	<0.0002	<0.005	<0.0005	<0.0005	<0.001	<0.0002	<0.005	<0.001	<0.0002	<0.001	<0.001	<0.0002	<0.0001	<0.0001	<0.0002
Source	0021_SD005	12 Apr 2024	0021_SD005_240412	ES2411995	<0.0002	<0.0002	<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
Source	0021_SD005	22 Oct 2024	0021_SD005_241022	ES2435078	<0.0002	<0.0002	<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
Source	0021_SD005	02 Apr 2025	0021_SD005_250402	ES2510622	<0.0002	<0.0002	<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
Source	0021_SD007	11 Apr 2017	B_SED02_0-0.1	ES1708884	<0.0002	<0.0002	<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
Source	0021_SD007	20 Oct 2021	0021_QC104_211020	ES2138639	<0.0002	<0.0002	<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
Source	0021_SD007	20 Oct 2021	0021_SD007_211020	ES2138639	0.0003	<0.0002	<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
Source	0021_SD007	07 Apr 2022	0021_SD007_220407	ES2212442	0.0015	<0.0002	0.0004	<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
Source	0021_SD007	12 Oct 2022	0021_SD007_221012	ES2237106	0.0011	<0.0002	0.0004	<0.0006#1	<0.0002	<0.0002	<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
Source	0021_SD007	20 Apr 2023	0021_QC114_230420	ES2313364	0.0002	<0.0002	<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
Source	0021_SD007	20 Apr 2023	0021_QC214_230420	321517	<0.0001	<0.0001	<0.0002	<0.005	<0.0005	<0.0005	<0.001	<0.0002	<0.005	<0.001	<0.0002	<0.001	<0.001	<0.0002	<0.0001	<0.0001	<0.0002
Source	0021_SD007	20 Apr 2023	0021_SD007_230420	ES2313364	<0.0002	<0.0002	<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
Source	0021_SD007	18 Oct 2023	0021_SD007_231018	ES2336399	0.0009	<0.0002	<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
Source	0021_SD007	10 Apr 2024	0021_SD007_240410	ES2411995	<0.0002	<0.0002	<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
Source	0021_SD007	24 Oct 2024	0021_SD007_241024	ES2435541	<0.0002	<0.0002	<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
Source	0021_SD012	13 Apr 2017	DC_SED01_0-0.1	ES1709064	<0.0002	<0.0002	<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
Source	0021_SD012	20 Oct 2021	0021_SD012_211020	ES2138639	<0.0002	<0.0002	<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

					FAS - Perfluoroalkyl Carboxylic Acids						PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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	mg/kg
EQL					0.0001	0.0001	0.0002	0.0005	0.0002	0.0002	0.0005	0.0002	0.0005	0.0005	0.0002	0.0005	0.0002	0.0002	0.0001	0.0001	0.0002
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																	
Source	0021_SD012	06 Apr 2022	0021_SD012_220406	ES2212442	<0.0002	<0.0002	<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
Source	0021_SD012	14 Oct 2022	0021_SD012_221014	ES2237106	<0.0002	<0.0002	<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
Source	0021_SD012	21 Apr 2023	0021_SD012_230421	ES2313364	<0.0002	<0.0002	<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
Source	0021_SD012	19 Oct 2023	0021_SD012_231019	ES2336399	<0.0002	<0.0002	<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
Source	0021_SD012	12 Apr 2024	0021_SD012_240412	ES2411995	<0.0002	<0.0002	<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
Source	0021_SD012	22 Oct 2024	0021_SD012_241022	ES2435078	<0.0002	<0.0002	<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
Source	0021_SD012	02 Apr 2025	0021_SD012_250402	ES2510622	<0.0002	<0.0002	<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
Source	0021_SD013	13 Apr 2017	DC_SED02_0-0.1	ES1709064	<0.0002	<0.0002	<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
Source	0021_SD013	20 Oct 2021	0021_SD013_211020	ES2138639	0.0003	<0.0002	<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
Source	0021_SD013	06 Apr 2022	0021_QC208_220406	293031	0.0008	<0.0001	<0.0002	<0.005	<0.0005	<0.0005	<0.001	<0.0002	<0.005	<0.001	<0.0002	<0.001	<0.001	<0.0002	<0.0001	<0.0001	<0.0002
Source	0021_SD013	06 Apr 2022	0021_SD013_220406	ES2212442	0.0004	<0.0002	<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
Source	0021_SD013	14 Oct 2022	0021_SD013_221014	ES2237106	0.0008	<0.0002	0.0003	<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
Source	0021_SD013	21 Apr 2023	0021_SD013_230421	ES2313364	0.0028	<0.0002	0.0007	<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
Source	0021_SD013	19 Oct 2023	0021_SD013_231019	ES2336399	0.0007	<0.0002	<0.0002	<0.0005	<0.0002	0.0006	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Source	0021_SD013	12 Apr 2024	0021_QC113_240412	ES2411995	0.0009	<0.0002	0.0003	<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
Source	0021_SD013	12 Apr 2024	0021_QC213_240412	348825	0.0012	<0.0001	0.0005	<0.005	<0.0005	<0.0005	<0.001	<0.0002	<0.005	<0.001	<0.0002	<0.001	<0.001	<0.0002	<0.0001	<0.0001	<0.0002
Source	0021_SD013	12 Apr 2024	0021_SD013_240412	ES2411995	0.0006	<0.0002	0.0003	<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
Source	0021_SD013	22 Oct 2024	0021_SD013_241022	ES2435078	0.0002	<0.0002	<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
Source	0021_SD013	02 Apr 2025	0021_SD013_250402	ES2510622	<0.0002	<0.0002	<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
Source	0021_SD110	20 Oct 2021	0021_QC206_211020	281322	<0.0001	<0.0001	<0.0002	<0.005	<0.0005	<0.0005	<0.001	<0.0002	<0.005	<0.001	<0.0002	<0.001	<0.001	<0.0002	<0.0001	<0.0001	<0.0002
Source	0021_SD110	20 Oct 2021	0021_SD110_211020	ES2138639	<0.0002	<0.0002	<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
Source	0021_SD110	06 Apr 2022	0021_SD110_220406	ES2212442	<0.0002	<0.0002	<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
Source	0021_SD110	14 Oct 2022	0021_SD110_221014	ES2237106	<0.0002	<0.0002	<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
Source	0021_SD110	21 Apr 2023	0021_SD110_230421	ES2313364	<0.0002	<0.0002	<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
Source	0021_SD110	19 Oct 2023	0021_SD110_231019	ES2336399	0.0010	<0.0002	0.0004	<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
Source	0021_SD110	12 Apr 2024	0021_SD110_240412	ES2411995	<0.0002	<0.0002	<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
Source	0021_SD110	22 Oct 2024	0021_SD110_241022	ES2435078	<0.0002	<0.0002	<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
Source	0021_SD110	02 Apr 2025	0021_SD110_250402	ES2510622	<0.0002	<0.0002	<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
Pathway	0021_SD006	12 Apr 2017	B_SED01_0.3-0.4	ES1709064	<0.0002	<0.0002	<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
Pathway	0021_SD006	20 Oct 2021	0021_SD006_211020	ES2138639	0.0049	<0.0002	0.0027	<0.0006[#1]	<0.0002	0.0002	<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
Pathway	0021_SD006	12 Oct 2022	0021_SD006_221012	ES2237106	0.0036	<0.0002	0.0013	<0.0006[#1]	<0.0002	<0.0002	<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
Pathway	0021_SD006	19 Apr 2023	0021_SD006_230419	ES2313364	0.0015	<0.0002	<0.0002	<0.0006[#1]	<0.0002	<0.0002	<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
Pathway	0021_SD006	18 Oct 2023	0021_SD006_231018	ES2336399	0.0222	<0.0005[#1]	0.0092	<0.0012[#1]	<0.0005[#1]	<0.0005[#1]	<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
Pathway	0021_SD006	10 Apr 2024	0021_SD006_240410	ES2411995	0.0018	<0.0002	0.0014	<0.0006[#1]	<0.0002	<0.0002	<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
Pathway	0021_SD006	25 Oct 2024	0021_SD006_241025	ES2435541	0.0055	0.0003	0.0024	<0.0006[#1]	<0.0002	0.0003	<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
Pathway	0021_SD006	30 Jan 2025	0021_SD006_250130	ES2503552	0.0008	0.0002	<0.0002	<0.0005	<0.0002	0.0006	<0.0005	0.0004	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Pathway	0021_SD006	02 Apr 2025	0021_SD006_250404	ES2510622	0.0028	0.0004	0.0016	<0.0006[#1]	<0.0002	0.0003	<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
Pathway	0021_SD014	13 Apr 2017	DC_SED03_0-0.1	ES1709064	<0.0002	<0.0002	<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
Pathway	0021_SD014	20 Oct 2021	0021_QC106_211020	ES2138639	0.0005	<0.0002	<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
Pathway	0021_SD014	20 Oct 2021	0021_SD014_211020	ES2138639	0.0005	<0.0002	<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
Pathway	0021_SD014	06 Apr 2022	0021_QC108_220406	ES2212442	<0.0002	<0.0002	<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
Pathway	0021_SD014	06 Apr 2022	0021_SD014_220406	ES2212442	<0.0002	<0.0002	<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
Pathway	0021_SD014	14 Oct 2022	0021_QC215_221014	308187	<0.0001	<0.0001	<0.0002	<0.005	<0.0005	<0.0005	<0.001	<0.0002	<0.005	<0.001	<0.0002	<0.004	<0.001	<0.0002	<0.0001	<0.0001	<0.0002
Pathway	0021_SD014	14 Oct 2022	0021_SD014_221014	ES2237106	<0.0002	<0.0002	<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
Pathway	0021_SD014	21 Apr 2023	0021_SD014_230421	ES2313364	<0.0002	<0.0002	<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
Pathway	0021_SD014	19 Oct 2023	0021_SD014_231019	ES2336399	<0.0002	<0.0002	<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
Pathway	0021_SD014	22 Oct 2024	0021_SD014_241022	ES2435078	0.0002	<0.0002	<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
Pathway	0021_SD014	23 Oct 2024	0021_QC102_241022	ES2435078	0.0002	<0.0002	<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
Pathway	0021_SD014	23 Oct 2024	0021_QC202_241022	ES2435078	0.0002	<0.0002	<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
Pathway	0021_SD014	02 Apr 2025	0021_SD014_250402	ES2510622	<0.0002	<0.0002	<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
Pathway	0021_SD036	23 Mar 2018	MC_SD02_0.0_180323	ES1809241	<0.0002	<0.0002	<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
Pathway	0021_SD036	11 Oct 2022	0021_SD036_221011	ES2237106	<0.0002	<0.0002	<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
Pathway	0021_SD036	18 Apr 2023	0021_SD036_230418	ES2313364	<0.0002	<0.0002	<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
Pathway	0021_SD036	17 Oct 2023	0021_SD036_231017	ES2336399	<0.0002	<0.0002	<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
Pathway	0021_SD036	09 Apr 2024	0021_SD036_240409	ES2411995	0.0020	<0.0002	0.0009	<0.0005	<0.0002	0.0003	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0020	<0.0005	<0.0005	<0.0005	<0.0005
Pathway	0021_SD036	28 Oct 2024	0021_SD036_241028	ES2435541	<0.0002	<0.0002	<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
Pathway	0021_SD036	01 Apr 2025	0021_SD036_250401	ES2510622	<0.0002	<0.0002	<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
Pathway	0021_SD037	23 Mar 2018	MC_SD03_0.0_180323	ES1809241	<0.0002	<0.0002	<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
Pathway	0021_SD037	05 May 2018	MC_SD03_0.0_180501	ES1812871	<0.0002	<0.0002	<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
Pathway	0021_SD037	11 Oct 2022	0021_SD037_221011	ES2237106	<0.0002	<0.0002	<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
Pathway	0021_SD037	18 Apr 2023	0021_SD037_230418	ES2313364	<0.0002	<0.0002	<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
Pathway	0021_SD037	17 Oct 2023	0021_SD037_231017	ES2336399	<0.0002	<0.0002	<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
Pathway	0021_SD037	09 Apr 2024	0021_SD037_240409	ES2411995	<0.0002	<0.0002	<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

					FAS - Perfluoroalkyl Carboxylic Acids						PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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	mg/kg
EQL					0.0001	0.0001	0.0002	0.0005	0.0002	0.0002	0.0005	0.0002	0.0005	0.0005	0.0002	0.0005	0.0002	0.0002	0.0001	0.0001	0.0002
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																	
Pathway	0021_SD037	23 Oct 2024	0021_SD037_241023	ES2435078	<0.0002	<0.0002	<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
Pathway	0021_SD037	03 Apr 2025	0021_SD037_250401	ES2510622	<0.0002	<0.0002	<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
Pathway	0021_SD040	28 Mar 2018	MC_QC110_180328	ES1809328	<0.0002	<0.0002	<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
Pathway	0021_SD040	05 Apr 2018	MC_SD06_0.0_180405	ES1810551	<0.0002	<0.0002	<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
Pathway	0021_SD040	12 Oct 2022	0021_SD040_221012	ES2237106	<0.0002	<0.0002	<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
Pathway	0021_SD040	19 Apr 2023	0021_SD040_230419	ES2313364	<0.0002	<0.0002	<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
Pathway	0021_SD040	18 Oct 2023	0021_SD040_231017	ES2336399	<0.0002	<0.0002	<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
Pathway	0021_SD040	10 Apr 2024	0021_SD040_240410	ES2411995	<0.0002	0.0002	<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
Pathway	0021_SD040	25 Oct 2024	0021_SD040_241025	ES2435541	<0.0002	<0.0002	<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
Pathway	0021_SD040	03 Apr 2025	0021_SD040_250403	ES2510622	<0.0002	<0.0002	<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
Pathway	0021_SD111	11 Oct 2022	0021_SD111_221011	ES2237106	<0.0002	<0.0002	<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
Pathway	0021_SD111	17 Oct 2023	0021_QC100_231017	ES2336399	<0.0002	<0.0002	<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
Pathway	0021_SD111	17 Oct 2023	0021_QC200_231017	335876	<0.0003	<0.0003	<0.0006	<0.02	<0.002	<0.005	<0.003	<0.001	<0.02	<0.003	<0.0006	<0.003	<0.003	<0.0006	<0.0003	<0.0003	<0.0006
Pathway	0021_SD111	17 Oct 2023	0021_SD111_231017	ES2336399	<0.0002	<0.0002	<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
Pathway	0021_SD111	09 Apr 2024	0021_SD111_240409	ES2411995	0.0009	<0.0002	0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0003	<0.0005	<0.0005	<0.0005	<0.0005
Pathway	0021_SD111	23 Oct 2024	0021_SD111_241023	ES2435078	<0.0002	<0.0002	<0.0002	<0.0006[#1]	<0.0002	<0.0002	<0.0006[#1]	<0.0002	<0.0006[#1]	<0.0006[#1]	<0.0002	<0.0006[#1]	0.0015	<0.0005	<0.0005	<0.0005	<0.0005
Pathway	0021_SD111	29 Jan 2025	0021_SD111_250129	ES2503552	0.0003	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0022	<0.0005	<0.0005	<0.0005	<0.0005
Pathway	0021_SD111	01 Apr 2025	0021_SD111_250401	ES2510622	0.0030	<0.0002	0.0014	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0016	<0.0005	<0.0005	<0.0005	<0.0005
Receptor	0021_SD035	20 Mar 2018	MC_SD01_0.0_180320	ES1808818	<0.0002	<0.0002	<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
Receptor	0021_SD035	20 Mar 2018	MC_SD01_0.3_180320	ES1814922	<0.0002	-	<0.0002	-	-	-	-	-	-	-	-	-	-	<0.0005	<0.0005	<0.0005	<0.0005
Receptor	0021_SD035	01 May 2018	MC_SD01_0.0_180501	ES1812871	<0.0002	<0.0002	<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
Receptor	0021_SD035	12 Oct 2022	0021_SD035_221012	ES2237106	<0.0002	<0.0002	<0.0002	<0.0006[#1]	<0.0002	<0.0002	<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
Receptor	0021_SD035	18 Apr 2023	0021_SD035_230418	ES2313364	<0.0002	<0.0002	<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
Receptor	0021_SD035	17 Oct 2023	0021_SD035_231017	ES2336399	<0.0002	<0.0002	<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
Receptor	0021_SD035	09 Apr 2024	0021_SD035_240409	ES2411995	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0004	<0.0005	<0.0005	<0.0005	<0.0005
Receptor	0021_SD035	23 Oct 2024	0021_SD035_241023	ES2435078	<0.0002	<0.0002	<0.0002	<0.0006[#1]	<0.0002	0.0003	<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
Receptor	0021_SD035	29 Jan 2025	0021_SD035_250129	ES2503552	<0.0002	<0.0002	<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
Receptor	0021_SD035	01 Apr 2025	0021_SD035_250401	ES2510622	<0.0002	<0.0002	<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
Receptor	0021_SD043	28 Mar 2018	MC_SD09_0.0_180328	ES1809328	<0.0002	<0.0002	<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
Receptor	0021_SD043	23 Oct 2024	0021_SD043_241023	ES2435078	<0.0002	<0.0002	<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
Receptor	0021_SD043	03 Apr 2025	0021_SD043_250403	ES2510622	<0.0002	<0.0002	<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
Receptor	0021_SD044	20 Mar 2018	MC_SD10_0.0_180320	ES1808818	<0.0002	<0.0002	<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
Receptor	0021_SD044	20 Mar 2018	MC_SD10_0.3_180320	ES1814922	<0.0002	-	<0.0002	-	-	-	-	-	-	-	-	-	-	<0.0005	<0.0005	<0.0005	<0.0005
Receptor	0021_SD044	28 Mar 2018	MC_SD10_0.0_180328	ES1814922	<0.0002	-	<0.0002	-	-	-	-	-	-	-	-	-	-	<0.0005	<0.0005	<0.0005	<0.0005
Receptor	0021_SD044	28 Mar 2018	MC_SD10_0.2_180328	ES1814922	<0.0002	-	<0.0002	-	-	-	-	-	-	-	-	-	-	<0.0005	<0.0005	<0.0005	<0.0005
Receptor	0021_SD044	12 Oct 2022	0021_SD044_221012	ES2237106	<0.0002	<0.0002	<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
Receptor	0021_SD044	18 Apr 2023	0021_SD044_230418	ES2313364	<0.0002	<0.0002	<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
Receptor	0021_SD044	17 Oct 2023	0021_QC106_231017	ES2336399	<0.0002	<0.0002	<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
Receptor	0021_SD044	17 Oct 2023	0021_QC206_231017	335876	<0.0001	<0.0001	<0.0002	<0.005	<0.0005	<0.0005	<0.001	<0.0002	<0.005	<0.001	<0.0002	<0.001	<0.001	<0.0002	<0.0001	<0.0001	<0.0002
Receptor	0021_SD044	17 Oct 2023	0021_SD044_231017	ES2336399	<0.0002	<0.0002	<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
Receptor	0021_SD044	09 Apr 2024	0021_SD044_240409	ES2411995	<0.0002	<0.0002	<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
Receptor	0021_SD044	23 Oct 2024	0021_QC107_241023	ES2435078	<0.0002	<0.0002	<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
Receptor	0021_SD044	23 Oct 2024	0021_QC207_241023	1154751	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
Receptor	0021_SD044	23 Oct 2024	0021_SD044_241023	ES2435078	<0.0002	<0.0002	<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
Receptor	0021_SD044	29 Jan 2025	0021_SD044_250129	ES2503552	<0.0002	<0.0002	<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
Receptor	0021_SD044	01 Apr 2025	0021_QC104_250401	ES2510113	<0.0002	<0.0002	<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
Receptor	0021_SD044	01 Apr 2025	0021_QC204_250401	1210052	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
Receptor	0021_SD044	01 Apr 2025	0021_SD044_250401	ES2510622	<0.0002	<0.0002	<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

	FAS - Perfluoroalkyl Carboxylic Acids						PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
	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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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	mg/kg
EQL	0.0001	0.0001	0.0002	0.0005	0.0002	0.0002	0.0005	0.0002	0.0005	0.0005	0.0002	0.0005	0.0002	0.0002	0.0001	0.0001	0.0002
Statistics																	
Number of Results	174	170	174	170	170	170	170	170	170	170	170	170	170	174	174	174	174
Number of Detects	49	4	27	0	0	9	0	2	0	0	0	0	21	0	0	0	0
Minimum Concentration	<0.0001	<0.0001	0.0002	<0.0005	<0.0002	0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	0.0002	<0.0002	<0.0001	<0.0001	<0.0002
Minimum Detect	0.0002	0.0002	0.0002	ND	ND	0.0002	ND	0.0003	ND	ND	ND	ND	0.0002	ND	ND	ND	ND
Maximum Concentration	0.0222	<0.005	0.0092	<0.05	<0.005	<0.005	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	0.0105	<0.005	<0.005	<0.01	<0.005
Maximum Detect	0.0222	0.0004	0.0092	ND	ND	0.0006	ND	0.0004	ND	ND	ND	ND	0.0105	ND	ND	ND	ND
Average Concentration *	0.00072	0.00016	0.00039	0.0007	0.00019	0.00021	0.00037	0.00023	0.0007	0.00037	0.00023	0.00038	0.00054	0.0003	0.00029	0.00035	0.0003
Geometric Average *	0.0002	0.00011	0.00015	0.00033	0.00012	0.00013	0.00029	0.00012	0.00033	0.00029	0.00011	0.0003	0.00017	0.00025	0.00024	0.00024	0.00025
Median Concentration *	0.0001	0.0001	0.0001	0.00025	0.0001	0.0001	0.00025	0.0001	0.00025	0.00025	0.0001	0.00025	0.0001	0.00025	0.00025	0.00025	0.00025
Standard Deviation *	0.0022	0.00037	0.0011	0.0022	0.00042	0.00045	0.00051	0.00075	0.0022	0.00051	0.00075	0.00053	0.0014	0.00035	0.00034	0.00072	0.00035
Geometric Standard Deviation *	3.5	1.8	2.6	2.3	1.9	2	1.6	1.9	2.3	1.6	1.9	1.7	3.1	1.5	1.7	1.8	1.5
95% UCL (Student's-t) *	0.00099332	0.00020979	0.00052941	0.00098731	0.00024542	0.00027085	0.00043453	0.0003245	0.00098731	0.00043453	0.00032035	0.00044524	0.00071233	0.00034129	0.00033362	0.00043794	0.00034129
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	28	2	16	0	0	5	0	1	0	0	0	0	12	0	0	0	0
% of Non-Detects	72	98	84	100	100	95	100	99	100	100	100	100	88	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 Reported Analyte LOR is higher than Requested Analyte LOR

					PFAS			PFAS - Sums				PFAS - Perfluoroalkyl Sulfonic Acids				PFAS - Perfluoroalkyl Carboxylic Acids							
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	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)
					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	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	0.0001	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001	0.0002	0.0005
0020_0021_Human health ceremonial					0.0002	0.0002		0.0002															
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																			
Pathway	0021_SD047	23 Mar 2018	SC_SD02_0.0_180323	ES1809241	<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	<0.0002	<0.0005
		12 Oct 2022	0021_SD047_221012	ES2237106	<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	<0.0002	<0.0005
		18 Apr 2023	0021_SD047_230418	ES2313364	<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	<0.0002	<0.0005
		17 Oct 2023	0021_SD047_231017	ES2336399	<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	<0.0002	<0.0005
		09 Apr 2024	0021_SD047_240409	ES2411995	0.0003	<0.0002	<0.0002	0.0003	0.0003	0.0003	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005
	0021_SD048	18 Apr 2023	0021_SD048_230418	ES2313364	<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	<0.0002	<0.0005
		17 Oct 2023	0021_SD048_231017	ES2336399	<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	<0.0002	<0.0005
		09 Apr 2024	0021_SD048_240409	ES2411995	0.0005	<0.0002	<0.0002	0.0005	0.0005	0.0005	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005
	0021_SD049	05 Apr 2018	SC_SD04_0.0_180406	ES1810551	<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	<0.0002	<0.0005
		22 Oct 2021	0021_SD049_211022	ES2138639	<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	<0.0002	<0.0005
		07 Apr 2022	0021_SD049_220407	ES2212442	0.0005	<0.0002	<0.0002	0.0005	0.0010	0.0010	-	0.0005	<0.0002	<0.0002	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0006[#1]
		13 Oct 2022	0021_SD049_221013	ES2237106	<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	<0.0002	<0.0005
		17 Apr 2023	0021_SD049_230417	ES2313364	0.0007	<0.0002	<0.0002	0.0007	0.0007	0.0007	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005
		18 Oct 2023	0021_SD049_231018	ES2336399	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	<0.0002	<0.0002	<0.0002	<0.0005
		10 Apr 2024	0021_QC108_240410	ES2411995	0.0003	<0.0002	<0.0002	0.0003	0.0003	0.0003	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005
			0021_QC208_240410	348825	0.0007	<0.0001	<0.0001	0.0007	0.0007	-	0.0007	<0.0001	<0.0002	<0.0001	<0.0001	<0.0002	<0.0005	<0.0005	<0.0001	<0.0001	<0.0001	<0.0002	<0.005
			0021_SD049_240410	ES2411995	0.0005	<0.0002	<0.0002	0.0005	0.0005	0.0005	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005
		24 Oct 2024	0021_SD049_241024	ES2435541	0.0008	<0.0002	<0.0002	0.0008	0.0008	0.0008	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005
		03 Apr 2025	0021_SD049_250404	ES2510622	<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	<0.0002	<0.0005
Receptor	0021_SD046	23 Mar 2018	SC_SD01_0.0_180323	ES1809241	<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	<0.0002	<0.0005
		12 Oct 2022	0021_SD046_221012	ES2237106	<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	<0.0002	<0.0005
		18 Apr 2023	0021_SD046_230418	ES2313364	<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	<0.0002	<0.0005
		17 Oct 2023	0021_SD046_231017	ES2336399	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	<0.0002	<0.0005
		09 Apr 2024	0021_SD046_240409	ES2411995	<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	<0.0002	<0.0005
		23 Oct 2024	0021_QC155_241023	ES2435078	<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	<0.0002	<0.0005
			0021_SD046_241023	ES2435078	<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	<0.0002	<0.0005
		29 Jan 2025	0021_SD046_250129	ES2503552	<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	<0.0002	<0.0005
		03 Apr 2025	0021_SD046_250401	ES2510622	<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	<0.0002	<0.0005
	0021_SD075	28 Mar 2018	UN3_SD05_0.0_180328	ES1809328	<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	<0.0002	<0.0005
			UN_QC210_180328	592096	<0.005	<0.005	<0.005	<0.005	<0.05	<0.01	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
		12 Oct 2022	0021_SD075_221012	ES2237106	<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	<0.0002	<0.0005
		18 Apr 2023	0021_SD075_230418	ES2313364	<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	<0.0002	<0.0005
		17 Oct 2023	0021_SD075_231017	ES2336399	<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	<0.0002	<0.0005
		09 Apr 2024	0021_SD075_240409	ES2411995	<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	<0.0002	<0.0005
		23 Oct 2024	0021_SD075_241023	ES2435078	<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	<0.0002	<0.0005
		01 Apr 2025	0021_SD075_250401	ES2510622	<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	<0.0002	<0.0005
	0021_SD188	21 Dec 2022	0021_SD188_221221	EW2205954	<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	<0.0002	<0.0005
		24 Oct 2024	0021_SD188_241024	ES2435541	<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	<0.0002	<0.0005
		03 Apr 2025	0021_SD188_250403	ES2510622	<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	<0.0002	<0.0005
			0021_SD188_A_250403	ES2510622	<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	<0.0002	<0.0005

	PFAS			PFAS - Sums				PFAS - Perfluoroalkyl Sulfonic Acids				PFAS - Perfluoroalkyl Carboxylic Acids							
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	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)
	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	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	0.0001	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001	0.0002	0.0005
0020_0021_Human health ceremonial	0.0002	0.0002		0.0002															
Statistics																			
Number of Results	40	40	40	40	40	39	1	40	40	40	40	40	40	40	40	40	40	40	40
Number of Detects	10	0	0	10	11	10	1	1	0	0	0	0	0	0	0	1	0	0	0
Minimum Concentration	0.0002	<0.0001	<0.0001	0.0002	0.0002	0.0002	0.0007	<0.0001	<0.0002	<0.0001	<0.0001	<0.0002	<0.0002	<0.0002	<0.0001	<0.0001	<0.0001	<0.0002	<0.0005
Minimum Detect	0.0002	ND	ND	0.0002	0.0002	0.0002	0.0007	0.0005	ND	ND	ND	ND	ND	ND	ND	ND	0.0002	ND	ND
Maximum Concentration	<0.005	<0.005	<0.005	<0.005	<0.05	<0.01	0.0007	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Maximum Detect	0.0008	ND	ND	0.0008	0.001	0.001	0.0007	0.0005	ND	ND	ND	ND	ND	ND	ND	0.0002	ND	ND	ND
Average Concentration *	0.00026	0.00016	0.00016	0.00026	0.00084	0.00033		0.00017	0.00016	0.00016	0.00016	0.00054	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00036
Geometric Average *	0.00016	0.00011	0.00011	0.00016	0.00017	0.00016	0.0007	0.00011	0.00011	0.00011	0.00011	0.0005	0.00011	0.00011	0.00011	0.00011	0.00011	0.00011	0.00028
Median Concentration *	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0007	0.0001	0.0001	0.0001	0.0001	0.0005	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.00025
Standard Deviation *	0.00041	0.00038	0.00038	0.00041	0.0039	0.0008		0.00038	0.00038	0.00038	0.00038	0.00032	0.00038	0.00038	0.00038	0.00038	0.00038	0.00038	0.0005
Geometric Standard Deviation *	2.3	1.7	1.7	2.3	3	2.4		1.8	1.7	1.7	1.7	1.4	1.7	1.7	1.7	1.7	1.7	1.7	1.7
95% UCL (Student's-t) *	0.0003674	0.00025992	0.00025992	0.0003674	0.00188	0.00054106		0.00027089	0.00026109	0.00025992	0.00025992	0.00062633	0.00026488	0.00026488	0.00025992	0.0002624	0.00025992	0.00026109	0.00049599
Number of Env Standard Exceedances	9	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Env Standard Exceedances (Detects Only)	9	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Detects	25	0	0	25	28	26	100	2	0	0	0	0	0	0	0	2	0	0	0
% of Non-Detects	75	100	100	75	72	74	0	98	100	100	100	100	100	100	100	98	100	100	100
% of Detects at or above Env Standards	22	0	0	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Results Below Env Standards or Non-Detect	78	100	100	78	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

Environmental Standards

JBRF/HMAS Creswell OMP Site Specific Criteria

						PFAS - Perfluoroalkyl Sulfonamide								PFAS - Fluorotelomer Sulfonic Acids			
					Perfluorotridecanoic acid (PFTrDA)	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 (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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
EQL					0.0002	0.0002	0.0005	0.0002	0.0005	0.0005	0.0002	0.0005	0.0002	0.0002	0.0001	0.0001	0.0002
0020_0021_Human health ceremonial																	
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**													
Pathway	0021_SD047	23 Mar 2018	SC_SD02_0.0_180323	ES1809241	<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
		12 Oct 2022	0021_SD047_221012	ES2237106	<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
		18 Apr 2023	0021_SD047_230418	ES2313364	<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
		17 Oct 2023	0021_SD047_231017	ES2336399	<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
		09 Apr 2024	0021_SD047_240409	ES2411995	<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
	0021_SD048	18 Apr 2023	0021_SD048_230418	ES2313364	<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
		17 Oct 2023	0021_SD048_231017	ES2336399	<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
		09 Apr 2024	0021_SD048_240409	ES2411995	<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
	0021_SD049	05 Apr 2018	SC_SD04_0.0_180406	ES1810551	<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
		22 Oct 2021	0021_SD049_211022	ES2138639	<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
		07 Apr 2022	0021_SD049_220407	ES2212442	<0.0002	<0.0002	<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
		13 Oct 2022	0021_SD049_221013	ES2237106	<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
		17 Apr 2023	0021_SD049_230417	ES2313364	<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
		18 Oct 2023	0021_SD049_231018	ES2336399	<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
		10 Apr 2024	0021_QC108_240410	ES2411995	<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
			0021_QC208_240410	348825	<0.0005	<0.0005	<0.001	<0.0002	<0.005	<0.001	<0.0002	<0.001	<0.001	<0.0002	<0.0001	<0.0001	<0.0002
			0021_SD049_240410	ES2411995	<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
		24 Oct 2024	0021_SD049_241024	ES2435541	<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
		03 Apr 2025	0021_SD049_250404	ES2510622	<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
Receptor	0021_SD046	23 Mar 2018	SC_SD01_0.0_180323	ES1809241	<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
		12 Oct 2022	0021_SD046_221012	ES2237106	<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
		18 Apr 2023	0021_SD046_230418	ES2313364	<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
		17 Oct 2023	0021_SD046_231017	ES2336399	<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
		09 Apr 2024	0021_SD046_240409	ES2411995	<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
		23 Oct 2024	0021_QC155_241023	ES2435078	<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
			0021_SD046_241023	ES2435078	<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
		29 Jan 2025	0021_SD046_250129	ES2503552	<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
		03 Apr 2025	0021_SD046_250401	ES2510622	<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
	0021_SD075	28 Mar 2018	UN3_SD05_0.0_180328	ES1809328	<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
			UN_QC210_180328	592096	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
		12 Oct 2022	0021_SD075_221012	ES2237106	<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
		18 Apr 2023	0021_SD075_230418	ES2313364	<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
		17 Oct 2023	0021_SD075_231017	ES2336399	<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
		09 Apr 2024	0021_SD075_240409	ES2411995	<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
		23 Oct 2024	0021_SD075_241023	ES2435078	<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
		01 Apr 2025	0021_SD075_250401	ES2510622	<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
	0021_SD188	21 Dec 2022	0021_SD188_221221	EW2205954	<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
		24 Oct 2024	0021_SD188_241024	ES2435541	<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
		03 Apr 2025	0021_SD188_250403	ES2510622	<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
			0021_SD188_A_250403	ES2510622	<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

			PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
	Perfluorotridecanoic acid (PFTrDA)	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 (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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
EQL	0.0002	0.0002	0.0005	0.0002	0.0005	0.0005	0.0002	0.0005	0.0002	0.0002	0.0001	0.0001	0.0002
0020_0021_Human health ceremonial													
Statistics													
Number of Results	40	40	40	40	40	40	40	40	40	40	40	40	40
Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0001	<0.0001	<0.0002
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *	0.00016	0.00016	0.00031	0.00022	0.00036	0.00031	0.00022	0.00031	0.00017	0.0003	0.0003	0.00036	0.0003
Geometric Average *	0.00011	0.00011	0.00027	0.00011	0.00028	0.00027	0.00011	0.00027	0.00011	0.00026	0.00025	0.00026	0.00026
Median Concentration *	0.0001	0.0001	0.00025	0.0001	0.00025	0.00025	0.0001	0.00025	0.0001	0.00025	0.00025	0.00025	0.00025
Standard Deviation *	0.00038	0.00038	0.00036	0.00077	0.0005	0.00036	0.00077	0.00036	0.00038	0.00036	0.00036	0.00075	0.00036
Geometric Standard Deviation *	1.7	1.7	1.5	1.9	1.7	1.5	1.9	1.5	1.8	1.5	1.6	1.7	1.5
95% UCL (Student's-t) *	0.00026488	0.00026488	0.0004088	0.0004289	0.00049599	0.0004088	0.0004289	0.0004088	0.00027206	0.00039765	0.00039661	0.00056422	0.00039765
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.

Comments

#1 Reported Analyte LOR is higher than Requested Analyte LOR

Environmental Standards

JBRF/HMAS Creswell OMP Site Specific Criteria

					PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids						PFAS			
					Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)
					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	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	0.005	0.0001	0.005	0.0001	0.0002	0.0002	0.0002	0.0001
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																		
Pathway	0021_SD052	20 Mar 2018	TC_SD03_0.0_180320	ES1808818	<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
		21 Oct 2021	0021_SD052_211021	ES2138639	<0.0002	<0.0002	<0.0002	<0.0002	0.0028	0.0028	-	-	0.0028	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
		07 Apr 2022	0021_SD052_220407	ES2212442	<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
		19 Apr 2023	0021_SD052_230419	ES2313364	<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
		16 Oct 2023	0021_SD052_231016	ES2336399	<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
		08 Apr 2024	0021_SD052_240408	ES2411995	<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
		23 Oct 2024	0021_SD052_241023	ES2435078	0.0008	<0.0002	<0.0002	0.0008	0.0029	0.0029	-	-	0.0011	<0.0002	-	<0.0002	-	<0.0002	0.001	<0.0002	<0.0002	<0.0002
	0021_SD054	20 Mar 2018	TC_SD05_0.0_180320	ES1808818	0.0045	<0.0002	<0.0002	0.0045	0.0045	0.0045	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
			TC_SD05_0.2_180322	ES1814922	<0.0002	<0.0002	<0.0002	<0.0002	-	<0.0002	-	-	<0.0002	-	-	-	-	-	<0.001	-	-	<0.0002
		04 Apr 2022	0021_SD054_220404	ES2212442	0.0102	0.0016	<0.0002	0.0118	0.0235	0.0225	-	-	0.0004	0.0010	-	<0.0002	-	<0.0002	0.009	<0.0002	<0.0002	<0.0002
		19 Apr 2023	0021_SD054_230419	ES2313364	0.0007	<0.0002	<0.0002	0.0007	0.0007	0.0007	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
		08 Apr 2024	0021_SD054_240408	ES2411995	0.0082	<0.0002	<0.0002	0.0082	0.0103	0.0085	-	-	<0.0002	<0.0002	-	0.0003	-	0.0003	<0.001	<0.0002	0.0004	<0.0002
		23 Oct 2024	0021_SD054_241023	ES2435078	0.0035	0.0005	<0.0002	0.0040	0.0040	0.0040	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
		02 Apr 2025	0021_QC135_250402	ES2510113	0.0082	0.0007	<0.0005[#1]	0.0089	0.0089	0.0089	-	-	<0.0005[#1]	<0.0005[#1]	-	<0.0005[#1]	-	<0.0005[#1]	<0.002[#1]	<0.0005[#1]	<0.0005[#1]	<0.0005[#1]
			0021_QC235_250402	1210052	0.0051	<0.005	<0.005	0.0051	<0.05	<0.01	0.0051	0.0051	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
			0021_SD054_250402	ES2510622	0.0070	<0.0002	<0.0002	0.0070	0.0083	0.0070	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
Receptor	0021_SD050	21 Mar 2018	TC_SD01_0.0_180321	ES1808818	0.0007	<0.0002	<0.0002	0.0007	0.0007	0.0007	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
		21 Oct 2021	0021_SD050_211021	ES2138639	0.0011	<0.0002	<0.0002	0.0011	0.0011	0.0011	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
		07 Apr 2022	0021_SD050_220407	ES2212442	0.0014	<0.0002	<0.0002	0.0014	0.0014	0.0014	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
		17 Apr 2023	0021_SD050_230417	ES2313364	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
		16 Oct 2023	0021_SD050_231016	ES2336399	0.0005	<0.0002	<0.0002	0.0005	0.0005	0.0005	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
		10 Apr 2024	0021_SD050_240410	ES2411995	<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
		25 Oct 2024	0021_SD050_241025	ES2435541	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
		03 Apr 2025	0021_SD050_250401	ES2510622	0.0013	<0.0002	<0.0002	0.0013	0.0013	0.0013	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
	0021_SD058	21 Mar 2018	TC_SD09_0.0_180321	ES1808818	<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
		21 Oct 2021	0021_SD058_211021	ES2138639	<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
		07 Apr 2022	0021_SD058_220407	ES2212442	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
		12 Oct 2022	0021_SD058_221012	ES2237106	<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
		17 Apr 2023	0021_SD058_230417	ES2313364	<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
		16 Oct 2023	0021_SD058_231016	ES2336399	0.0002	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
		10 Apr 2024	0021_SD058_240410	ES2411995	0.0012	<0.0002	<0.0002	0.0012	0.0012	0.0012	-	-	<0.0002	<0.0002	-	<0.0002	-	<0.0002	<0.001	<0.0002	<0.0002	<0.0002
		25 Oct 2024	0021_SD058_241025	ES2435541	<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
		03 Apr 2025	0021_SD058_250401	ES2510622	<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
	0021_SD059	26 Mar 2018	TC_SD10_0.0_180326	ES1809241	<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
		21 Oct 2021	0021_SD059_211021	ES2138639	<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
		07 Apr 2022	0021_SD059_220407	ES2212442	<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
		12 Oct 2022	0021_QC213_221012	308187	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	-	<0.0001	-	<0.0001	<0.0002	-	<0.0001	-	<0.0001	<0.0002	<0.0005	<0.0005	<0.0001
			0021_SD059_221012	ES2237106	<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
		17 Apr 2023	0021_SD059_230417	ES2313364	<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
		16 Oct 2023	0021_SD059_231016	ES2336399	<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
		10 Apr 2024	0021_SD059_240410	ES2411995	<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
		25 Oct 2024	0021_SD059_241025	ES2435541	<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
		03 Apr 2025	0021_SD059_250401	ES2510622	<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

	PFAS			PFAS - Sums					PFAS - Perfluoroalkyl Sulfonic Acids						PFAS			
	Perfluorooctane sulfonic acid (PFOS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluorooctanoic acid (PFOA)	Sum of PFHxS and PFOS	PFAS (Sum of Total)	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)	Perfluorobutanoic acid (PFBA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluoroheptanoic acid (PFHpA)
	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	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	0.005	0.0001	0.005	0.0001	0.0002	0.0002	0.0002	0.0001
Statistics																		
Number of Results	43	43	43	43	42	42	2	1	43	42	1	42	1	42	43	42	42	43
Number of Detects	19	4	0	19	19	19	1	1	3	1	0	1	0	1	2	0	1	0
Minimum Concentration	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0002	<0.0001	0.0051	<0.0001	<0.0002	<0.005	<0.0001	<0.005	<0.0001	<0.0002	<0.0002	<0.0002	<0.0001
Minimum Detect	0.0002	0.0002	ND	0.0002	0.0002	0.0002	0.0051	0.0051	0.0004	0.001	ND	0.0003	ND	0.0003	0.001	ND	0.0004	ND
Maximum Concentration	0.0102	<0.005	<0.005	0.0118	<0.05	0.0225	0.0051	0.0051	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.009	<0.005	<0.005	<0.005
Maximum Detect	0.0102	0.0016	ND	0.0118	0.0235	0.0225	0.0051	0.0051	0.0028	0.001	ND	0.0003	ND	0.0003	0.009	ND	0.0004	ND
Average Concentration *	0.0013	0.00022	0.00016	0.0014	0.0024	0.0018	0.0026		0.00025	0.00018		0.00016		0.00016	0.00076	0.00016	0.00017	0.00016
Geometric Average *	0.00032	0.00012	0.00011	0.00033	0.0004	0.00039	0.0005	0.0051	0.00013	0.00012	0.0025	0.00011	0.0025	0.00011	0.00055	0.00011	0.00012	0.00011
Median Concentration *	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.002575	0.0051	0.0001	0.0001	0.0025	0.0001	0.0025	0.0001	0.0005	0.0001	0.0001	0.0001
Standard Deviation *	0.0026	0.00044	0.00037	0.0028	0.0055	0.004	0.0036		0.00056	0.00039		0.00037		0.00037	0.0013	0.00037	0.00037	0.00037
Geometric Standard Deviation *	5	2.1	1.7	5	6.1	5.4	26		2.3	1.9		1.7		1.7	1.8	1.7	1.8	1.7
95% UCL (Student's-t) *	0.00201	0.00032687	0.00025213	0.00212	0.00383	0.00286	0.0185		0.00039486	0.00028401		0.00026069		0.00026069	0.0011	0.00026052	0.00026809	0.00025213
Number of Env Standard Exceedances	17	4	1	18	7	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Env Standard Exceedances (Detects Only)	17	3	0	18	6	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Detects	44	9	0	44	45	45	50	100	7	2	0	2	0	2	5	0	2	0
% of Non-Detects	56	91	100	56	55	55	50	0	93	98	100	98	100	98	95	100	98	100
% of Detects at or above Env Standards	40	7	0	42	14	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Results Below Env Standards or Non-Detect	60	93	100	58	86	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

					- Perfluoroalkyl Carboxylic Acids						PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
					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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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	mg/kg
EQL					0.0001	0.0001	0.0002	0.0005	0.0002	0.0002	0.0005	0.0002	0.0005	0.0005	0.0002	0.0005	0.0002	0.0002	0.0001	0.0001	0.0002
SPR Type	**Location**	**Date**	**Field ID**	**Lab Report No.**																	
Pathway	0021_SD052	20 Mar 2018	TC_SD03_0.0_180320	ES1808818	<0.0002	<0.0002	<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
		21 Oct 2021	0021_SD052_211021	ES2138639	<0.0002	<0.0002	<0.0002	<0.0006[#1]	<0.0002	<0.0002	<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
		07 Apr 2022	0021_SD052_220407	ES2212442	<0.0002	<0.0002	<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
		19 Apr 2023	0021_SD052_230419	ES2313364	<0.0002	<0.0002	<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
		16 Oct 2023	0021_SD052_231016	ES2336399	<0.0002	<0.0002	<0.0002	<0.0006[#1]	<0.0002	<0.0002	<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
		08 Apr 2024	0021_SD052_240408	ES2411995	<0.0002	<0.0002	<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
		23 Oct 2024	0021_SD052_241023	ES2435078	<0.0002	<0.0002	<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
	0021_SD054	20 Mar 2018	TC_SD05_0.0_180320	ES1808818	<0.0002	<0.0002	<0.0002	<0.0006[#1]	<0.0002	<0.0002	<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
			TC_SD05_0.2_180322	ES1814922	<0.0002	-	<0.0002	-	-	-	-	-	-	-	-	-	-	<0.0005	<0.0005	<0.0005	<0.0005
		04 Apr 2022	0021_SD054_220404	ES2212442	0.0013	<0.0002	<0.0002	<0.0006[#1]	<0.0002	<0.0002	<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
		19 Apr 2023	0021_SD054_230419	ES2313364	<0.0002	<0.0002	<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
		08 Apr 2024	0021_SD054_240408	ES2411995	<0.0002	<0.0002	0.0003	<0.0006[#1]	<0.0002	<0.0002	<0.0006[#1]	<0.0002	<0.0006[#1]	0.0008	<0.0002	<0.0006[#1]	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
		23 Oct 2024	0021_SD054_241023	ES2435078	<0.0002	<0.0002	<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
		02 Apr 2025	0021_QC135_250402	ES2510113	<0.0005[#1]	<0.0005[#1]	<0.0005[#1]	<0.0012[#1]	<0.0005[#1]	<0.0005[#1]	<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
			0021_QC235_250402	1210052	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	0.0085	<0.005	<0.01	0.0073	<0.005	<0.005	<0.005	<0.01	<0.005
			0021_SD054_250402	ES2510622	<0.0002	0.0004	<0.0002	<0.0006[#1]	<0.0002	<0.0002	0.0009	<0.0002	<0.0006[#1]	<0.0006[#1]	<0.0002	<0.0006[#1]	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005
Receptor	0021_SD050	21 Mar 2018	TC_SD01_0.0_180321	ES1808818	<0.0002	<0.0002	<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
		21 Oct 2021	0021_SD050_211021	ES2138639	<0.0002	<0.0002	<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
		07 Apr 2022	0021_SD050_220407	ES2212442	<0.0002	<0.0002	<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
		17 Apr 2023	0021_SD050_230417	ES2313364	<0.0002	<0.0002	<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
		16 Oct 2023	0021_SD050_231016	ES2336399	<0.0002	<0.0002	<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
		10 Apr 2024	0021_SD050_240410	ES2411995	<0.0002	<0.0002	<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
		25 Oct 2024	0021_SD050_241025	ES2435541	<0.0002	<0.0002	<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
		03 Apr 2025	0021_SD050_250401	ES2510622	<0.0002	<0.0002	<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
	0021_SD058	21 Mar 2018	TC_SD09_0.0_180321	ES1808818	<0.0002	<0.0002	<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
		21 Oct 2021	0021_SD058_211021	ES2138639	<0.0002	<0.0002	<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
		07 Apr 2022	0021_SD058_220407	ES2212442	<0.0002	<0.0002	<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
		12 Oct 2022	0021_SD058_221012	ES2237106	<0.0002	<0.0002	<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
		17 Apr 2023	0021_SD058_230417	ES2313364	<0.0002	<0.0002	<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
		16 Oct 2023	0021_SD058_231016	ES2336399	<0.0002	<0.0002	<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
		10 Apr 2024	0021_SD058_240410	ES2411995	<0.0002	<0.0002	<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
		25 Oct 2024	0021_SD058_241025	ES2435541	<0.0002	<0.0002	<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
		03 Apr 2025	0021_SD058_250401	ES2510622	<0.0002	<0.0002	<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
	0021_SD059	26 Mar 2018	TC_SD10_0.0_180326	ES1809241	<0.0002	<0.0002	<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
		21 Oct 2021	0021_SD059_211021	ES2138639	<0.0002	<0.0002	<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
		07 Apr 2022	0021_SD059_220407	ES2212442	<0.0002	<0.0002	<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
		12 Oct 2022	0021_QC213_221012	308187	<0.0001	<0.0001	<0.0002	<0.005	<0.0005	<0.0005	<0.001	<0.0002	<0.005	<0.001	<0.0002	<0.001	<0.001	<0.0002	<0.0001	<0.0001	<0.0002
			0021_SD059_221012	ES2237106	<0.0002	<0.0002	<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
		17 Apr 2023	0021_SD059_230417	ES2313364	<0.0002	<0.0002	<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
		16 Oct 2023	0021_SD059_231016	ES2336399	<0.0002	<0.0002	<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
		10 Apr 2024	0021_SD059_240410	ES2411995	<0.0002	<0.0002	<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
		25 Oct 2024	0021_SD059_241025	ES2435541	<0.0002	<0.0002	<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
		03 Apr 2025	0021_SD059_250401	ES2510622	<0.0002	<0.0002	<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

	- Perfluoroalkyl Carboxylic Acids						PFAS - Perfluoroalkyl Sulfonamide							PFAS - Fluorotelomer Sulfonic Acids			
	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)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	Perfluorooctane sulfonamide (FOSA)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer Sulfonate (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 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	mg/kg
EQL	0.0001	0.0001	0.0002	0.0005	0.0002	0.0002	0.0005	0.0002	0.0005	0.0005	0.0002	0.0005	0.0002	0.0002	0.0001	0.0001	0.0002
Statistics																	
Number of Results	43	42	43	42	42	42	42	42	42	42	42	42	42	43	43	43	43
Number of Detects	1	1	1	0	0	0	1	0	1	1	0	1	0	0	0	0	0
Minimum Concentration	<0.0001	<0.0001	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005	<0.0002	<0.0002	<0.0001	<0.0001	<0.0002
Minimum Detect	0.0013	0.0004	0.0003	ND	ND	ND	0.0009	ND	0.0085	0.0008	ND	0.0073	ND	ND	ND	ND	ND
Maximum Concentration	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	0.0085	<0.005	<0.01	0.0073	<0.005	<0.005	<0.005	<0.01	<0.005
Maximum Detect	0.0013	0.0004	0.0003	ND	ND	ND	0.0009	ND	0.0085	0.0008	ND	0.0073	ND	ND	ND	ND	ND
Average Concentration *	0.00019	0.00017	0.00016	0.00037	0.00016	0.00016	0.00034	0.00022	0.00052	0.00034	0.00022	0.00044	0.00017	0.0003	0.0003	0.00036	0.0003
Geometric Average *	0.00011	0.00011	0.00011	0.00029	0.00011	0.00011	0.00029	0.00011	0.0003	0.00029	0.00011	0.00029	0.00011	0.00026	0.00025	0.00026	0.00026
Median Concentration *	0.0001	0.0001	0.0001	0.00025	0.0001	0.0001	0.00025	0.0001	0.00025	0.00025	0.0001	0.00025	0.0001	0.00025	0.00025	0.00025	0.00025
Standard Deviation *	0.00041	0.00037	0.00037	0.00048	0.00037	0.00037	0.00036	0.00076	0.0013	0.00036	0.00076	0.0011	0.00037	0.00034	0.00035	0.00073	0.00034
Geometric Standard Deviation *	1.9	1.8	1.7	1.7	1.7	1.7	1.5	1.9	1.9	1.5	1.9	1.7	1.8	1.5	1.5	1.7	1.5
95% UCL (Student's-t) *	0.00029006	0.00026339	0.000258	0.00049847	0.00026052	0.00026052	0.00043307	0.00041652	0.00085551	0.00042978	0.00041652	0.00072142	0.00026736	0.00038718	0.00038622	0.00054196	0.00038718
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	2	2	2	0	0	0	2	0	2	2	0	2	0	0	0	0	0
% of Non-Detects	98	98	98	100	100	100	98	100	98	98	100	98	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 Reported Analyte LOR is higher than Requested Analyte LOR

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.
– 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) Laboratory control samples Matrix spikes	All organic samples 1 per lab batch 1 per lab batch	70-130% <LOR 70-130%
Rinsate blanks	1/equipment/day	<LOR
Representativeness		
Sampling appropriate for media and analytes Samples extracted and analysed within holding times	All samples 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 sightly 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 D.

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. Trip blank 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	Intra-laboratory	0020_MW112_250331	0020_QC130_250331	67	PFOS
		0021_MW131_250401	0021_QC134_250401	105 120	PFOS PFHxS
		0021_MW153_250404	0021_QC140_250404	33	PFHxS
	Inter-laboratory	0020_MW112_250331	0020_QC230_250331	55	PFOS
		0021_SW153_250331	0021_QC202_250331	38	PFOS
Sediment	Intra-laboratory	0020_SD032_250331	0020_QC132_250331	47	PFOS
		0021_SD015_250403	0021_QC139_250403	48	PFHxS
	Inter-laboratory	0020_SD032_250331	0020_QC232_250331	69	PFOS
		0021_SD054_250402	0021_QC235_250402	31	PFOS
		0021_SD015_250403	0021_QC239_250403	57 55	PFOS PFHxS

C-2 Laboratory quality assurance / quality control

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

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

C-2-1 Laboratory quality control procedures

Laboratory QC samples incorporated in the analytical process include:

Laboratory blind duplicate samples

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

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

Table C3 Permitted laboratory blind duplicate relative percentage 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: **ES2510113, ES2510618, ES2510622, ES2510623, ES2512435, ES2512752***
Secondary laboratory and report numbers:	Eurofins: **1209674, 1210052**
*Report ES2512752 replaced report ES2512033 due to laboratory batching errors	

1. Field QA/QC sample collection	Media	Comments and DQI assessment
Number of Primary Samples analysed	85 (groundwater) 72 (surface water) 60 (sediment) 5 (tank samples)	-
Number of Days Sampling	8	-
Intra-Laboratory Field Duplicates (1/10 samples)	32 (9 sediment and 23 water)	Sample frequency DQI met for Intra-laboratory and inter-laboratory duplicate samples.
Inter-Laboratory Field Duplicates (1/10 samples)	31 (10 sediment and 21 water)	
Trip Blanks (1/ batch)	5 (3 water, 2 sediment)	Sample frequency DQI met. Samples delivered on the same day to ALS are considered as one batch, minimum of one trip blank per media per site was submitted.
Trip Spikes (1/ batch)	-	Trip spike not required.
Rinsate Blanks (1/equipment/day)	21	Sample frequency DQI met. Where groundwater was collected as a team only 1 rinsate sample was taken per day. Where surface was only collected per team in a day, no rinsate samples were collected as no reusable equipment was used.
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	Reports ES2512752 and ES2512435 reported sample receival temperatures of 8.8°C and 9.4°C. Some of these temperature measurements are higher than the recommended limit of 6.0ºC for chemical analysis. 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	Ten primary samples had RPD exceedances as outlined in Table 2. 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. SW153 sample variation may be attributed to sample heterogeneity due to fast flowing turbid water observed during sampling MW112 sample variation may be attributed to sediment observed within the matrix during sample collection The variation in the remaining water samples may be due to the high sensitivity of the laboratory analytical method. Sediment samples are likely to have slight heterogeneity in the soil which could lead to variation in the concentration of PFAS in the sediment. The maximum concentration of duplicate pairs has been considered for this report as a conservative measure.

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	**ES2510113** Matrix spike recovery was not able to be determined as the background level was ≥ 4x the spike level in sample 0021_MW128_250402 for PFHxS and sample 0021_MW164_250402 for PFOS. **ES2510618** Matrix spike recovery was not able to be determined as the background level was ≥ 4x the spike level in sample 0020_MW012_250408 for PFHxS and PFOS, and an anonymous sample for PFOS. **ES2510622** Matrix spike recovery was not able to be determined as the background level was ≥ 4x the spike level in two anonymous samples for PFOS and PFHxS. **ES2510623** Matrix spike recovery was unable to be determined as the background level was ≥ 4x the spike level in sample 0021_SW127_250401 for PFHxS and PFOS, and an 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	DQI requirements met.
Surrogates	Pass	DQI requirements met.
Frequency of Quality Control Samples	Pass	**ES2510618** Frequency of laboratory duplicate samples for PFAS analysis was not met. Expected rate = 10%, actual rate = 8.77%.

		ES2510623 Frequency of laboratory duplicate samples for PFAS analysis was not met. Expected rate = 10%, actual rate = 6.9% Frequency of matrix spike samples for PFAS analysis was not met. Expected rate = 5%, actual rate = 3.45%. **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

Sample Type			Normal	Field_D		Normal	Field_D		Normal	Interlab_D		Normal	Field_D		Normal	Interlab_D	
Location Code			0020_SD004	0020_SD004		0020_SD026	0020_SD026		0020_SD026	0020_SD026		0020_SD032	0020_SD032		0020_SD032	0020_SD032	
Field ID			0020_SD004_250331	0020_QC151_250331		0020_SD026_250331	0020_QC101_250331		0020_SD026_250331	0020_QC201_250331		0020_SD032_250331	0020_QC132_250331		0020_SD032_250331	0020_QC232_250331	
Date			31 Mar 2025	31 Mar 2025		31 Mar 2025	31 Mar 2025		31 Mar 2025	31 Mar 2025		31 Mar 2025	31 Mar 2025		31 Mar 2025	31 Mar 2025	
Lab Report Number			ES2510618	ES2510618		ES2510618	ES2510618		ES2510618	1209674		ES2510618	ES2510618		ES2510618	1209674	
Matrix Type			Soil	Soil	RPD	Soil	Soil	RPD	Soil	Soil	RPD	Soil	Soil	RPD	Soil	Soil	RPD
	Unit	EQL															
PFAS - Perfluoroalkyl Sulfonic Acids																	
Perfluorobutane sulfonic acid (PFBS)	mg/kg	0.0002	<0.0002	<0.0002	0	<0.0002	<0.0002	0	<0.0002	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0
Perfluorodecanesulfonic acid (PFDS)	mg/kg	0.0002	<0.0002	<0.0002	0	<0.0002	<0.0002	0	<0.0002	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0
Perfluoroheptane sulfonic acid (PFHpS)	mg/kg	0.0002	<0.0002	<0.0002	0	<0.0002	<0.0002	0	<0.0002	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0
Perfluorooctane sulfonic acid (PFOS)	mg/kg	0.0002	<0.0002	<0.0002	0	<0.0002	<0.0002	0	<0.0002	<0.005	0	0.0103	0.0064	**47**	0.0103	<0.005	**69**
Perfluoropentane sulfonic acid (PFPeS)	mg/kg	0.0002	<0.0002	<0.0002	0	<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	<0.0002	<0.0002	0	<0.0002	<0.0002	0	<0.0002	<0.005	0	0.0010	0.0007	35	0.0010	<0.005	0
PFAS - Perfluoroalkyl Carboxylic Acids																	
Perfluorobutanoic acid (PFBA)	mg/kg	0.001	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	<0.005	0	<0.001	<0.001	0	<0.001	<0.005	0
Perfluorodecanoic acid (PFDA)	mg/kg	0.0002	<0.0002	<0.0002	0	<0.0002	<0.0002	0	<0.0002	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0
Perfluorododecanoic acid (PFDoDA)	mg/kg	0.0002	<0.0002	<0.0002	0	<0.0002	<0.0002	0	<0.0002	<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	<0.0002	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	<0.0002	0	<0.0002	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0
Perfluorononanoic acid (PFNA)	mg/kg	0.0002	<0.0002	<0.0002	0	<0.0002	<0.0002	0	<0.0002	<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	<0.0002	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	<0.0002	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	<0.0005	0	<0.0005	<0.0005	0	<0.0005	<0.005	0	<0.0005	<0.0005	0	<0.0005	<0.005	0
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0002	<0.0002	<0.0002	0	<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	<0.0002	<0.0002	0	<0.0002	<0.0002	0	<0.0002	<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	<0.0005	0	<0.0005	<0.0005	0	<0.0005	<0.005	0	<0.0005	<0.0005	0	<0.0005	<0.005	0
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	mg/kg	0.0002	<0.0002	<0.0002	0	<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	<0.0005	0	<0.0005	<0.0005	0	<0.0005	<0.005	0	<0.0005	<0.0005	0	<0.0005	<0.005	0
N-Methyl perfluorooctane sulfonamide (MeFOSA)	mg/kg	0.0005	<0.0005	<0.0005	0	<0.0005	<0.0005	0	<0.0005	<0.005	0	<0.0005	<0.0005	0	<0.0005	<0.005	0
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	mg/kg	0.0002	<0.0002	<0.0002	0	<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	<0.0005	0	<0.0005	<0.0005	0	<0.0005	<0.005	0	<0.0005	<0.0005	0	<0.0005	<0.005	0
Perfluorooctane sulfonamide (FOSA)	mg/kg	0.0002	<0.0002	<0.0002	0	<0.0002	<0.0002	0	<0.0002	<0.005	0	0.0006	0.0006	0	0.0006	<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	<0.0005	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	<0.0005	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	<0.0005	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	<0.0005	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			Normal	Interlab_D		Normal	Interlab_D		Normal	Field_D		Normal	Interlab_D		Normal	Field_D	
Location Code			0020_SD002	0020_SD002		0020_SD001	0020_SD001		0021_SD044	0021_SD044		0021_SD044	0021_SD044		0021_SD054	0021_SD054	
Field ID			0020_SD002_250401	0020_QC252_250401		0020_SD001_250401	0020_QC253_250401		0021_SD044_250401	0021_QC104_250401		0021_SD044_250401	0021_QC204_250401		0021_SD054_250402	0021_QC135_250402	
Date			01 Apr 2025	01 Apr 2025		01 Apr 2025	01 Apr 2025		01 Apr 2025	01 Apr 2025		01 Apr 2025	01 Apr 2025		02 Apr 2025	02 Apr 2025	
Lab Report Number			ES2510618	1209674		ES2510618	1209674		ES2510622	ES2510113		ES2510622	1210052		ES2510622	ES2510113	
Matrix Type			Soil	Soil	RPD	Soil	Soil	RPD	Soil	Soil	RPD	Soil	Soil	RPD	Soil	Soil	RPD
	Unit	EQL															
PFAS - Perfluoroalkyl Sulfonic Acids																	
Perfluorobutane sulfonic acid (PFBS)	mg/kg	0.0002	<0.0002	<0.005	0	<0.0002	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0	<0.0002	<0.0005[#1]	0
Perfluorodecanesulfonic acid (PFDS)	mg/kg	0.0002	<0.0002	<0.005	0	<0.0002	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0	<0.0002	<0.0005[#1]	0
Perfluoroheptane sulfonic acid (PFHpS)	mg/kg	0.0002	<0.0002	<0.005	0	<0.0002	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0	<0.0002	<0.0005[#1]	0
Perfluorooctane sulfonic acid (PFOS)	mg/kg	0.0002	0.0017	<0.005	0	<0.0002	<0.005	0	<0.0002	0.0005	86	<0.0002	<0.005	0	0.0070	0.0082	16
Perfluoropentane sulfonic acid (PFPeS)	mg/kg	0.0002	<0.0002	<0.005	0	<0.0002	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0	<0.0002	<0.0005[#1]	0
Perfluorohexane sulfonic acid (PFHxS)	mg/kg	0.0002	0.0002	<0.005	0	<0.0002	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0	<0.0002	0.0007	111
PFAS - Perfluoroalkyl Carboxylic Acids																	
Perfluorobutanoic acid (PFBA)	mg/kg	0.001	<0.001	<0.005	0	<0.001	<0.005	0	<0.001	<0.001	0	<0.001	<0.005	0	<0.001	<0.002[#1]	0
Perfluorodecanoic acid (PFDA)	mg/kg	0.0002	<0.0002	<0.005	0	<0.0002	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0	<0.0002	<0.0005[#1]	0
Perfluorododecanoic acid (PFDoDA)	mg/kg	0.0002	<0.0002	<0.005	0	<0.0002	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0	<0.0002	<0.0005[#1]	0
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0002	<0.0002	<0.005	0	<0.0002	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0	<0.0002	<0.0005[#1]	0
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0002	<0.0002	<0.005	0	<0.0002	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0	<0.0002	<0.0005[#1]	0
Perfluorononanoic acid (PFNA)	mg/kg	0.0002	<0.0002	<0.005	0	<0.0002	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0	0.0004	<0.0005[#1]	0
Perfluorooctanoic acid (PFOA)	mg/kg	0.0002	<0.0002	<0.005	0	<0.0002	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0	<0.0002	<0.0005[#1]	0
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0002	<0.0002	<0.005	0	<0.0002	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0	<0.0002	<0.0005[#1]	0
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0005	<0.0005	<0.005	0	<0.0005	<0.005	0	<0.0005	<0.0005	0	<0.0005	<0.005	0	<0.0006[#1]	<0.0012[#1]	0
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0002	<0.0002	<0.005	0	<0.0002	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0	<0.0002	<0.0005[#1]	0
Perfluoroundecanoic acid (PFUnDA)	mg/kg	0.0002	<0.0002	<0.005	0	<0.0002	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0	<0.0002	<0.0005[#1]	0
PFAS - Perfluoroalkyl Sulfonamide																	
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	mg/kg	0.0005	<0.0005	<0.005	0	<0.0005	<0.005	0	<0.0005	<0.0005	0	<0.0005	<0.005	0	0.0009	<0.0012[#1]	0
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	mg/kg	0.0002	<0.0002	<0.01	0	<0.0002	<0.01	0	<0.0002	<0.0002	0	<0.0002	<0.01	0	<0.0002	<0.0005[#1]	0
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	mg/kg	0.0005	<0.0005	<0.005	0	<0.0005	<0.005	0	<0.0005	<0.0005	0	<0.0005	<0.005	0	<0.0006[#1]	<0.0012[#1]	0
N-Methyl perfluorooctane sulfonamide (MeFOSA)	mg/kg	0.0005	<0.0005	<0.005	0	<0.0005	<0.005	0	<0.0005	<0.0005	0	<0.0005	<0.005	0	<0.0006[#1]	<0.0012[#1]	0
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	mg/kg	0.0002	<0.0002	<0.01	0	<0.0002	<0.01	0	<0.0002	<0.0002	0	<0.0002	<0.01	0	<0.0002	<0.0005[#1]	0
N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	mg/kg	0.0005	<0.0005	<0.005	0	<0.0005	<0.005	0	<0.0005	<0.0005	0	<0.0005	<0.005	0	<0.0006[#1]	<0.0012[#1]	0
Perfluorooctane sulfonamide (FOSA)	mg/kg	0.0002	<0.0002	<0.005	0	<0.0002	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0	<0.0002	<0.0005[#1]	0
PFAS - Fluorotelomer Sulfonic Acids																	
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	mg/kg	0.0005	<0.0005	<0.005	0	<0.0005	<0.005	0	<0.0005	<0.0005	0	<0.0005	<0.005	0	<0.0005	<0.0005	0
6:2 Fluorotelomer Sulfonate (6:2 FTS)	mg/kg	0.0005	<0.0005	<0.01	0	<0.0005	<0.01	0	<0.0005	<0.0005	0	<0.0005	<0.01	0	<0.0005	<0.0005	0
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	mg/kg	0.0005	<0.0005	<0.005	0	<0.0005	<0.005	0	<0.0005	<0.0005	0	<0.0005	<0.005	0	<0.0005	<0.0005	0
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	mg/kg	0.0005	<0.0005	<0.005	0	<0.0005	<0.005	0	<0.0005	<0.0005	0	<0.0005	<0.005	0	<0.0005	<0.0005	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			Normal	Interlab_D		Normal	Field_D		Normal	Interlab_D		Normal	Field_D		Normal	Interlab_D	
Location Code			0021_SD054	0021_SD054		0021_SD015	0021_SD015		0021_SD015	0021_SD015		0021_SD073	0021_SD073		0021_SD073	0021_SD073	
Field ID			0021_SD054_250402	0021_QC235_250402		0021_SD015_250403	0021_QC139_250403		0021_SD015_250403	0021_QC239_250403		0021_SD073_250404	0021_QC110_250404		0021_SD073_250404	0021_QC210_250404	
Date			02 Apr 2025	02 Apr 2025		03 Apr 2025	03 Apr 2025		03 Apr 2025	03 Apr 2025		04 Apr 2025	04 Apr 2025		04 Apr 2025	04 Apr 2025	
Lab Report Number			ES2510622	1210052		ES2510622	ES2510113		ES2510622	1210052		ES2510622	ES2510113		ES2510622	1210052	
Matrix Type			Soil	Soil	RPD	Soil	Soil	RPD	Soil	Soil	RPD	Soil	Soil	RPD	Soil	Soil	RPD
	Unit	EQL															
PFAS - Perfluoroalkyl Sulfonic Acids																	
Perfluorobutane sulfonic acid (PFBS)	mg/kg	0.0002	<0.0002	<0.005	0	0.0006	0.0002	100	0.0006	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0
Perfluorodecanesulfonic acid (PFDS)	mg/kg	0.0002	<0.0002	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0
Perfluoroheptane sulfonic acid (PFHpS)	mg/kg	0.0002	<0.0002	<0.005	0	0.0006	0.0004	40	0.0006	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0
Perfluorooctane sulfonic acid (PFOS)	mg/kg	0.0002	0.0070	0.0051	31	0.0307	0.0250	20	0.0307	0.017[#2]	57	<0.0002	<0.0002	0	<0.0002	<0.005	0
Perfluoropentane sulfonic acid (PFPeS)	mg/kg	0.0002	<0.0002	<0.005	0	0.0006	0.0004	40	0.0006	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0
Perfluorohexane sulfonic acid (PFHxS)	mg/kg	0.0002	<0.0002	<0.005	0	0.0088	0.0054	48	0.0088	<0.005[#2]	55	<0.0002	<0.0002	0	<0.0002	<0.005	0
PFAS - Perfluoroalkyl Carboxylic Acids																	
Perfluorobutanoic acid (PFBA)	mg/kg	0.001	<0.001	<0.005	0	<0.001	<0.001	0	<0.001	<0.005	0	<0.001	<0.001	0	<0.001	<0.005	0
Perfluorodecanoic acid (PFDA)	mg/kg	0.0002	<0.0002	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0
Perfluorododecanoic acid (PFDoDA)	mg/kg	0.0002	<0.0002	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0002	<0.0002	<0.005	0	<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	<0.005	0	0.0004	<0.0002	67	0.0004	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0
Perfluorononanoic acid (PFNA)	mg/kg	0.0002	0.0004	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0
Perfluorooctanoic acid (PFOA)	mg/kg	0.0002	<0.0002	<0.005	0	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	<0.005	0	<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	<0.0006[#1]	<0.005	0	<0.0005	<0.0005	0	<0.0005	<0.005	0	<0.0005	<0.0005	0	<0.0005	<0.005	0
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0002	<0.0002	<0.005	0	<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	<0.0002	<0.005	0	<0.0002	<0.0002	0	<0.0002	<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	0.0009	<0.005	0	<0.0005	<0.0005	0	<0.0005	<0.005	0	<0.0005	<0.0005	0	<0.0005	<0.005	0
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	mg/kg	0.0002	<0.0002	<0.01	0	<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	<0.0006[#1]	0.0085	174	<0.0005	<0.0005	0	<0.0005	<0.005	0	<0.0005	<0.0005	0	<0.0005	<0.005	0
N-Methyl perfluorooctane sulfonamide (MeFOSA)	mg/kg	0.0005	<0.0006[#1]	<0.005	0	<0.0005	<0.0005	0	<0.0005	<0.005	0	<0.0005	<0.0005	0	<0.0005	<0.005	0
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	mg/kg	0.0002	<0.0002	<0.01	0	<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	<0.0006[#1]	0.0073	170	<0.0005	<0.0005	0	<0.0005	<0.005	0	<0.0005	<0.0005	0	<0.0005	<0.005	0
Perfluorooctane sulfonamide (FOSA)	mg/kg	0.0002	<0.0002	<0.005	0	<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	<0.005	0	<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	<0.01	0	<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	<0.005	0	<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	<0.005	0	<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			Normal	Field_D		Normal	Interlab_D		Normal	Field_D		Normal	Interlab_D	
Location Code			0021_SD080	0021_SD080		0021_SD080	0021_SD080		0021_SD093	0021_SD093		0021_SD093	0021_SD093	
Field ID			0021_SD080_250404	0021_QC141_250404		0021_SD080_250404	0021_QC241_250404		0021_SD093_250404	0021_QC111_250404		0021_SD093_250404	0021_QC211_250404	
Date			04 Apr 2025	04 Apr 2025		04 Apr 2025	04 Apr 2025		04 Apr 2025	04 Apr 2025		04 Apr 2025	04 Apr 2025	
Lab Report Number			ES2510622	ES2510113		ES2510622	1210052		ES2510622	ES2510113		ES2510622	1210052	
Matrix Type			Soil	Soil	RPD	Soil	Soil	RPD	Soil	Soil	RPD	Soil	Soil	RPD
	Unit	EQL												
PFAS - Perfluoroalkyl Sulfonic Acids														
Perfluorobutane sulfonic acid (PFBS)	mg/kg	0.0002	<0.0002	<0.0002	0	<0.0002	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0
Perfluorodecanesulfonic acid (PFDS)	mg/kg	0.0002	<0.0002	<0.0002	0	<0.0002	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0
Perfluoroheptane sulfonic acid (PFHpS)	mg/kg	0.0002	<0.0002	<0.0002	0	<0.0002	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0
Perfluorooctane sulfonic acid (PFOS)	mg/kg	0.0002	<0.0002	<0.0002	0	<0.0002	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0
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	<0.0002	<0.0002	0	<0.0002	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0
PFAS - Perfluoroalkyl Carboxylic Acids														
Perfluorobutanoic acid (PFBA)	mg/kg	0.001	<0.001	<0.001	0	<0.001	<0.005	0	<0.001	<0.001	0	<0.001	<0.005	0
Perfluorodecanoic acid (PFDA)	mg/kg	0.0002	<0.0002	<0.0002	0	<0.0002	<0.005	0	<0.0002	<0.0002	0	<0.0002	<0.005	0
Perfluorododecanoic acid (PFDoDA)	mg/kg	0.0002	<0.0002	<0.0002	0	<0.0002	<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	<0.0002	<0.0002	0	<0.0002	<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	<0.0005	0	<0.0005	<0.005	0	<0.0005	<0.0005	0	<0.0005	<0.005	0
Perfluorotridecanoic acid (PFTrDA)	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	<0.0002	<0.0002	0	<0.0002	<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	<0.0005	0	<0.0005	<0.005	0	<0.0005	<0.0005	0	<0.0005	<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	<0.0005	0	<0.0005	<0.005	0	<0.0005	<0.0005	0	<0.0005	<0.005	0
N-Methyl perfluorooctane sulfonamide (MeFOSA)	mg/kg	0.0005	<0.0005	<0.0005	0	<0.0005	<0.005	0	<0.0005	<0.0005	0	<0.0005	<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	<0.0005	0	<0.0005	<0.005	0	<0.0005	<0.0005	0	<0.0005	<0.005	0
Perfluorooctane sulfonamide (FOSA)	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			Normal	Field_D		Normal	Interlab_D		Normal	Field_D		Normal	Interlab_D		Normal	Field_D	
Location Code			0020_SW057	0020_SW057		0020_SW057	0020_SW057		0020_MW112	0020_MW112		0020_MW112	0020_MW112		0020_MW037	0020_MW037	
Field ID			0020_SW057_250331	0020_QC100_250331		0020_SW057_250331	0020_QC200_250331		0020_MW112_250331	0020_QC130_250331		0020_MW112_250331	0020_QC230_250331		0020_MW037_250331	0020_QC131_250331	
Date			31 Mar 2025	31 Mar 2025		31 Mar 2025	31 Mar 2025		31 Mar 2025	31 Mar 2025		31 Mar 2025	31 Mar 2025		31 Mar 2025	31 Mar 2025	
Lab Report Number			ES2510618	ES2510618		ES2510618	1209674		ES2510618	ES2510618		ES2510618	1209674		ES2510618	ES2510618	
Matrix Type			Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD
	Unit	EQL															
PFAS - Perfluoroalkyl Sulfonic Acids																	
Perfluorobutane sulfonic acid (PFBS)	µg/L	0.0005	<0.02	<0.02	0	<0.02	<0.01	0	0.06	0.05	18	0.06	0.05	18	0.90	0.86	5
Perfluorodecanesulfonic acid (PFDS)	µg/L	0.0005	<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
Perfluoroheptane sulfonic acid (PFHpS)	µg/L	0.0005	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	0.35	0.39	11
Perfluorooctane sulfonic acid (PFOS)	µg/L	0.0001	0.08	0.09	12	0.08	0.11	32	0.14	0.07	**67**	0.14	0.08	**55**	2.51	2.24	11
Perfluoropentane sulfonic acid (PFPeS)	µg/L	0.0005	<0.02	<0.02	0	<0.02	<0.01	0	0.05	0.04	22	0.05	0.04	22	0.73	0.84	14
Perfluorohexane sulfonic acid (PFHxS)	µg/L	0.0005	0.04	0.05	22	0.04	0.04	0	0.47	0.41	14	0.47	0.46	2	5.16	5.67	9
PFAS - Perfluoroalkyl Carboxylic Acids																	
Perfluorobutanoic acid (PFBA)	µg/L	0.002	<0.1	<0.1	0	<0.1	<0.05	0	<0.1	<0.1	0	<0.1	<0.05	0	0.4	0.4	0
Perfluorodecanoic acid (PFDA)	µg/L	0.0005	<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	0.0005	<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	0.0005	<0.02	<0.02	0	<0.02	<0.01	0	0.04	0.03	29	0.04	0.03	29	0.32	0.31	3
Perfluorohexanoic acid (PFHxA)	µg/L	0.0005	<0.02	<0.02	0	<0.02	<0.01	0	0.10	0.09	11	0.10	0.11	10	2.09	1.83	13
Perfluorononanoic acid (PFNA)	µg/L	0.0005	<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	0.0005	<0.01	<0.01	0	<0.01	<0.01	0	0.05	0.04	22	0.05	0.06	18	0.44	0.45	2
Perfluoropentanoic acid (PFPeA)	µg/L	0.0005	<0.02	<0.02	0	<0.02	<0.01	0	0.04	0.04	0	0.04	0.06	40	1.21	1.17	3
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.0005	<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	0.0005	<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	0.0005	<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	0.001	<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	0.0005	<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	0.001	<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	0.001	<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	0.0005	<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	0.001	<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 (FOSA)	µg/L	0.0005	<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	0.001	<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	0.001	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	3.58	3.87	8
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	µg/L	0.001	<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	0.001	<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

***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			Normal	Interlab_D		Normal	Field_D		Normal	Field_D		Normal	Interlab_D		Normal	Field_D	
Location Code			0020_MW037	0020_MW037		0020_SW018	0020_SW018		0020_SW022	0020_SW022		0020_SW022	0020_SW022		0021_SW153	0021_SW153	
Field ID			0020_MW037_250331	0020_QC231_250331		0020_SW018_250331	0020_QC150_250331		0020_SW022_250331	0020_QC133_250331		0020_SW022_250331	0020_QC233_250331		0021_SW153_250331	0021_QC102_250331	
Date			31 Mar 2025	31 Mar 2025		31 Mar 2025	31 Mar 2025		31 Mar 2025	31 Mar 2025		31 Mar 2025	31 Mar 2025		31 Mar 2025	31 Mar 2025	
Lab Report Number			ES2510618	1209674		ES2510618	ES2510618		ES2510618	ES2510618		ES2510618	1209674		ES2510623	ES2510113	
Matrix Type			Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD
	Unit	EQL															
PFAS - Perfluoroalkyl Sulfonic Acids																	
Perfluorobutane sulfonic acid (PFBS)	µg/L	0.0005	0.90	0.94	4	<0.02	<0.02	0	<0.02	<0.02	0	<0.02	0.02	0	0.03	0.03	0
Perfluorodecanesulfonic acid (PFDS)	µg/L	0.0005	<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
Perfluoroheptane sulfonic acid (PFHpS)	µg/L	0.0005	0.35	0.39	11	<0.02	<0.02	0	<0.02	<0.02	0	<0.02	<0.01	0	0.03	0.03	0
Perfluorooctane sulfonic acid (PFOS)	µg/L	0.0001	2.51	2.2	13	0.27	0.34	23	0.18	0.19	5	0.18	0.21	15	1.16	1.36	16
Perfluoropentane sulfonic acid (PFPeS)	µg/L	0.0005	0.73	0.77	5	<0.02	<0.02	0	<0.02	<0.02	0	<0.02	<0.01	0	0.04	0.04	0
Perfluorohexane sulfonic acid (PFHxS)	µg/L	0.0005	5.16	5.9	13	0.15	0.16	6	0.11	0.11	0	0.11	0.12	9	0.69	0.68	1
PFAS - Perfluoroalkyl Carboxylic Acids																	
Perfluorobutanoic acid (PFBA)	µg/L	0.002	0.4	0.47	16	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.05	0	<0.1	<0.1	0
Perfluorodecanoic acid (PFDA)	µg/L	0.0005	<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
Perfluorododecanoic acid (PFDoDA)	µg/L	0.0005	<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
Perfluoroheptanoic acid (PFHpA)	µg/L	0.0005	0.32	0.30	6	<0.02	<0.02	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluorohexanoic acid (PFHxA)	µg/L	0.0005	2.09	1.9	10	0.03	0.03	0	0.02	0.03	40	0.02	0.03	40	0.08	0.08	0
Perfluorononanoic acid (PFNA)	µg/L	0.0005	<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
Perfluorooctanoic acid (PFOA)	µg/L	0.0005	0.44	0.50	13	<0.01	0.01	0	<0.01	<0.01	0	<0.01	<0.01	0	0.02	0.02	0
Perfluoropentanoic acid (PFPeA)	µg/L	0.0005	1.21	1.3	7	<0.02	<0.02	0	<0.02	<0.02	0	<0.02	0.02	0	0.02	<0.02	0
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.0005	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.0005	<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
Perfluoroundecanoic acid (PFUnDA)	µg/L	0.0005	<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
PFAS - Perfluoroalkyl Sulfonamide																	
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	µg/L	0.001	<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	0.0005	<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
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	µg/L	0.001	<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	0.001	<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	0.0005	<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
N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	µg/L	0.001	<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 (FOSA)	µg/L	0.0005	<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	0.001	<0.05	<0.1	0	<0.05	<0.05	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	0.001	3.58	4.0	11	<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	0.001	<0.05	<0.01	0	<0.05	<0.05	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	0.001	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0

***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			Normal	Interlab_D		Normal	Field_D		Normal	Interlab_D		Normal	Interlab_D		Normal	Field_D	
Location Code			0021_SW153	0021_SW153		0020_SW032	0020_SW032		0020_SW027	0020_SW027		0020_SW026	0020_SW026		0021_SW068	0021_SW068	
Field ID			0021_SW153_250331	0021_QC202_250331		0020_SW032_250331	0020_QC152_250331		0020_SW027_250401	0020_QC250_250401		0020_SW026_250401	0020_QC251_250401		0021_SW068_250401	0021_QC103_250401	
Date			31 Mar 2025	31 Mar 2025		31 Mar 2025	31 Mar 2025		01 Apr 2025	01 Apr 2025		01 Apr 2025	01 Apr 2025		01 Apr 2025	01 Apr 2025	
Lab Report Number			ES2510623	1210052		ES2510618	ES2510618		ES2510618	1209674		ES2510618	1209674		ES2510623	ES2510113	
Matrix Type			Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD
	Unit	EQL															
PFAS - Perfluoroalkyl Sulfonic Acids																	
Perfluorobutane sulfonic acid (PFBS)	µg/L	0.0005	0.03	0.04	29	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluorodecanesulfonic acid (PFDS)	µg/L	0.0005	<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
Perfluoroheptane sulfonic acid (PFHpS)	µg/L	0.0005	0.03	0.04	29	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluorooctane sulfonic acid (PFOS)	µg/L	0.0001	1.16	1.7	**38**	<0.01	<0.01	0	0.04	0.06	40	<0.01	<0.01	0	<0.01	0.01	0
Perfluoropentane sulfonic acid (PFPeS)	µg/L	0.0005	0.04	0.05	22	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluorohexane sulfonic acid (PFHxS)	µg/L	0.0005	0.69	0.74	7	<0.01	<0.01	0	0.04	0.05	22	<0.01	<0.01	0	<0.01	<0.01	0
PFAS - Perfluoroalkyl Carboxylic Acids																	
Perfluorobutanoic acid (PFBA)	µg/L	0.002	<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	0.0005	<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	0.0005	<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	0.0005	<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
Perfluorohexanoic acid (PFHxA)	µg/L	0.0005	0.08	0.10	22	<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	0.0005	<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	0.0005	0.02	0.03	40	<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	0.0005	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	0.0005	<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 (PFTrDA)	µg/L	0.0005	<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	0.0005	<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	0.001	<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	0.0005	<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	0.001	<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	0.001	<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	0.0005	<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	0.001	<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 (FOSA)	µg/L	0.0005	<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
PFAS - Fluorotelomer Sulfonic Acids																	
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	µg/L	0.001	<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	0.001	<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	0.001	<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	0.001	<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

***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			Normal	Interlab_D		Normal	Field_D		Normal	Interlab_D		Normal	Field_D		Normal	Field_D	
Location Code			0021_SW068	0021_SW068		0021_MW126	0021_MW126		0021_MW126	0021_MW126		0021_MW112	0021_MW112		0021_MW131	0021_MW131	
Field ID			0021_SW068_250401	0021_QC203_250401		0021_MW126_250401	0021_QC105_250401		0021_MW126_250401	0021_QC205_250401		0021_MW112_250401	0021_QC154_250401		0021_MW131_250401	0021_QC134_250401	
Date			01 Apr 2025	01 Apr 2025		01 Apr 2025	01 Apr 2025		01 Apr 2025	01 Apr 2025		01 Apr 2025	01 Apr 2025		01 Apr 2025	01 Apr 2025	
Lab Report Number			ES2510623	1210052		ES2510113	ES2510113		ES2510113	1210052		ES2510113	ES2510113		ES2510113	ES2510113	
Matrix Type			Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD
	Unit	EQL															
PFAS - Perfluoroalkyl Sulfonic Acids																	
Perfluorobutane sulfonic acid (PFBS)	µg/L	0.0005	<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	0.0005	<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
Perfluoroheptane sulfonic acid (PFHpS)	µg/L	0.0005	<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
Perfluorooctane sulfonic acid (PFOS)	µg/L	0.0001	<0.01	<0.01	0	<0.01	<0.01	0	<0.01	<0.01	0	<0.01	<0.01	0	0.05	0.16	**105**
Perfluoropentane sulfonic acid (PFPeS)	µg/L	0.0005	<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
Perfluorohexane sulfonic acid (PFHxS)	µg/L	0.0005	<0.01	<0.01	0	<0.01	<0.01	0	<0.01	<0.01	0	<0.01	<0.01	0	0.04	0.16	**120**
PFAS - Perfluoroalkyl Carboxylic Acids																	
Perfluorobutanoic acid (PFBA)	µg/L	0.002	<0.1	<0.05	0	<0.1	<0.1	0	<0.1	<0.05	0	<0.1	<0.1	0	<0.1	<0.1	0
Perfluorodecanoic acid (PFDA)	µg/L	0.0005	<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
Perfluorododecanoic acid (PFDoDA)	µg/L	0.0005	<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
Perfluoroheptanoic acid (PFHpA)	µg/L	0.0005	<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
Perfluorohexanoic acid (PFHxA)	µg/L	0.0005	<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
Perfluorononanoic acid (PFNA)	µg/L	0.0005	<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
Perfluorooctanoic acid (PFOA)	µg/L	0.0005	<0.01	<0.01	0	<0.01	<0.01	0	<0.01	<0.01	0	<0.01	<0.01	0	<0.01	0.02	67
Perfluoropentanoic acid (PFPeA)	µg/L	0.0005	<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
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.0005	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.05	0
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.0005	<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
Perfluoroundecanoic acid (PFUnDA)	µg/L	0.0005	<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
PFAS - Perfluoroalkyl Sulfonamide																	
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	µg/L	0.001	<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	0.0005	<0.02	<0.05	0	<0.02	<0.02	0	<0.02	<0.05	0	<0.02	<0.02	0	<0.02	<0.02	0
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	µg/L	0.001	<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	0.001	<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	0.0005	<0.02	<0.05	0	<0.02	<0.02	0	<0.02	<0.05	0	<0.02	<0.02	0	<0.02	<0.02	0
N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	µg/L	0.001	<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 (FOSA)	µg/L	0.0005	<0.02	<0.05	0	<0.02	<0.02	0	<0.02	<0.05	0	<0.02	<0.02	0	<0.02	<0.02	0
PFAS - Fluorotelomer Sulfonic Acids																	
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	µg/L	0.001	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.05	0
6:2 Fluorotelomer Sulfonate (6:2 FTS)	µg/L	0.001	<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	0.001	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.05	0
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	µg/L	0.001	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.05	0

***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			Normal	Interlab_D		Normal	Field_D		Normal	Interlab_D		Normal	Interlab_D		Normal	Field_D	
Location Code			0021_MW131	0021_MW131		0021_SW021	0021_SW021		0021_SW021	0021_SW021		0021_MW160	0021_MW160		0021_MW128	0021_MW128	
Field ID			0021_MW131_250401	0021_QC234_250401		0021_SW021_250402	0021_QC106_250402		0021_SW021_250402	0021_QC206_250402		0021_MW160_250402	0021_QC254_250402		0021_MW128_250402	0021_QC155_250402	
Date			01 Apr 2025	01 Apr 2025		02 Apr 2025	02 Apr 2025		02 Apr 2025	02 Apr 2025		02 Apr 2025	02 Apr 2025		02 Apr 2025	02 Apr 2025	
Lab Report Number			ES2510113	1210052		ES2510622	ES2510113		ES2510622	1210052		ES2510113	1210052		ES2510113	ES2510113	
Matrix Type			Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD
	Unit	EQL															
PFAS - Perfluoroalkyl Sulfonic Acids																	
Perfluorobutane sulfonic acid (PFBS)	µg/L	0.0005	<0.02	<0.01	0	0.02	<0.02	0	0.02	0.03	40	<0.02	<0.01	0	<0.02	<0.02	0
Perfluorodecanesulfonic acid (PFDS)	µg/L	0.0005	<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
Perfluoroheptane sulfonic acid (PFHpS)	µg/L	0.0005	<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
Perfluorooctane sulfonic acid (PFOS)	µg/L	0.0001	0.05	0.05	0	0.17	0.20	16	0.17	0.17	0	<0.01	<0.01	0	<0.01	<0.01	0
Perfluoropentane sulfonic acid (PFPeS)	µg/L	0.0005	<0.02	<0.01	0	0.03	0.02	40	0.03	0.03	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluorohexane sulfonic acid (PFHxS)	µg/L	0.0005	0.04	0.04	0	0.34	0.27	23	0.34	0.33	3	<0.01	<0.01	0	0.04	0.03	29
PFAS - Perfluoroalkyl Carboxylic Acids																	
Perfluorobutanoic acid (PFBA)	µg/L	0.002	<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	0.0005	<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	0.0005	<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	0.0005	<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
Perfluorohexanoic acid (PFHxA)	µg/L	0.0005	<0.02	0.01	0	0.05	0.04	22	0.05	0.05	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluorononanoic acid (PFNA)	µg/L	0.0005	<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	0.0005	<0.01	<0.01	0	<0.01	0.02	67	<0.01	<0.01	0	<0.01	<0.01	0	<0.01	<0.01	0
Perfluoropentanoic acid (PFPeA)	µg/L	0.0005	<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
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.0005	<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 (PFTrDA)	µg/L	0.0005	<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	0.0005	<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	0.001	<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	0.0005	<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	0.001	<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	0.001	<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	0.0005	<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	0.001	<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 (FOSA)	µg/L	0.0005	<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
PFAS - Fluorotelomer Sulfonic Acids																	
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	µg/L	0.001	<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	0.001	<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	0.001	<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	0.001	<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

***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			Normal	Field_D		Normal	Interlab_D		Normal	Field_D		Normal	Interlab_D		Normal	Interlab_D	
Location Code			0021_SW064	0021_SW064		0021_SW064	0021_SW064		0020_MW058	0020_MW058		0020_MW058	0020_MW058		0021_MW030	0021_MW030	
Field ID			0021_SW064_250402	0021_QC136_250402		0021_SW064_250402	0021_QC236_250402		0020_MW058_250403	0020_QC137_250403		0020_MW058_250403	0020_QC237_250403		0021_MW030_250403	0021_QC255_250403	
Date			02 Apr 2025	02 Apr 2025		02 Apr 2025	02 Apr 2025		03 Apr 2025	03 Apr 2025		03 Apr 2025	03 Apr 2025		03 Apr 2025	03 Apr 2025	
Lab Report Number			ES2510623	ES2510113		ES2510623	1210052		ES2510618	ES2510618		ES2510618	1209674		ES2510113	1210052	
Matrix Type			Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD
	Unit	EQL															
PFAS - Perfluoroalkyl Sulfonic Acids																	
Perfluorobutane sulfonic acid (PFBS)	µg/L	0.0005	<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
Perfluorodecanesulfonic acid (PFDS)	µg/L	0.0005	<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
Perfluoroheptane sulfonic acid (PFHpS)	µg/L	0.0005	<0.02	<0.02	0	<0.02	<0.01	0	0.02	0.03	40	0.02	0.03	40	<0.02	<0.01	0
Perfluorooctane sulfonic acid (PFOS)	µg/L	0.0001	<0.01	<0.01	0	<0.01	<0.01	0	2.49	2.56	3	2.49	2.7	8	0.04	<0.01	120
Perfluoropentane sulfonic acid (PFPeS)	µg/L	0.0005	<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
Perfluorohexane sulfonic acid (PFHxS)	µg/L	0.0005	<0.01	<0.01	0	<0.01	<0.01	0	0.57	0.57	0	0.57	0.51	11	0.02	<0.01	67
PFAS - Perfluoroalkyl Carboxylic Acids																	
Perfluorobutanoic acid (PFBA)	µg/L	0.002	<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
Perfluorodecanoic acid (PFDA)	µg/L	0.0005	<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
Perfluorododecanoic acid (PFDoDA)	µg/L	0.0005	<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
Perfluoroheptanoic acid (PFHpA)	µg/L	0.0005	<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
Perfluorohexanoic acid (PFHxA)	µg/L	0.0005	<0.02	<0.02	0	<0.02	<0.01	0	0.02	0.02	0	0.02	0.03	40	<0.02	<0.01	0
Perfluorononanoic acid (PFNA)	µg/L	0.0005	<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
Perfluorooctanoic acid (PFOA)	µg/L	0.0005	<0.01	<0.01	0	<0.01	<0.01	0	0.05	0.05	0	0.05	0.06	18	<0.01	<0.01	0
Perfluoropentanoic acid (PFPeA)	µg/L	0.0005	<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
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.0005	<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
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.0005	<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
Perfluoroundecanoic acid (PFUnDA)	µg/L	0.0005	<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
PFAS - Perfluoroalkyl Sulfonamide																	
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	µg/L	0.001	<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	0.0005	<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
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	µg/L	0.001	<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	0.001	<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	0.0005	<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
N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	µg/L	0.001	<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 (FOSA)	µg/L	0.0005	<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
PFAS - Fluorotelomer Sulfonic Acids																	
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	µg/L	0.001	<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
6:2 Fluorotelomer Sulfonate (6:2 FTS)	µg/L	0.001	<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	0.001	<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
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	µg/L	0.001	<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

***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			Normal	Field_D		Normal	Interlab_D		Normal	Field_D		Normal	Field_D		Normal	Interlab_D	
Location Code			0020_MW104	0020_MW104		0020_MW104	0020_MW104		0021_SW035	0021_SW035		0021_MW107	0021_MW107		0021_MW105	0021_MW105	
Field ID			0020_MW104_250403	0020_QC138_250403		0020_MW104_250403	0020_QC238_250403		0021_SW035_250403	0021_QC107_250403		0021_MW107_250403	0021_QC156_250403		0021_MW105_250403	0021_QC256_250403	
Date			03 Apr 2025	03 Apr 2025		03 Apr 2025	03 Apr 2025		03 Apr 2025	03 Apr 2025		03 Apr 2025	03 Apr 2025		03 Apr 2025	03 Apr 2025	
Lab Report Number			ES2510618	ES2510618		ES2510618	1209674		ES2510622	ES2510113		ES2510113	ES2510113		ES2510113	1210052	
Matrix Type			Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD
	Unit	EQL															
PFAS - Perfluoroalkyl Sulfonic Acids																	
Perfluorobutane sulfonic acid (PFBS)	µg/L	0.0005	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	0.10	0.09	11	0.07	<0.2	0
Perfluorodecanesulfonic acid (PFDS)	µg/L	0.0005	<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
Perfluoroheptane sulfonic acid (PFHpS)	µg/L	0.0005	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	0.07	0.06	15	0.17	0.24	34
Perfluorooctane sulfonic acid (PFOS)	µg/L	0.0001	<0.01	<0.01	0	<0.01	<0.01	0	<0.01	<0.01	0	1.53	1.86	19	16.0	21	27
Perfluoropentane sulfonic acid (PFPeS)	µg/L	0.0005	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	0.12	0.11	9	0.16	0.13	21
Perfluorohexane sulfonic acid (PFHxS)	µg/L	0.0005	<0.01	<0.01	0	<0.01	<0.01	0	<0.01	<0.01	0	1.59	1.42	11	3.43	4.2	20
PFAS - Perfluoroalkyl Carboxylic Acids																	
Perfluorobutanoic acid (PFBA)	µg/L	0.002	<0.1	<0.1	0	<0.1	<0.05	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.05	0
Perfluorodecanoic acid (PFDA)	µg/L	0.0005	<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
Perfluorododecanoic acid (PFDoDA)	µg/L	0.0005	<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
Perfluoroheptanoic acid (PFHpA)	µg/L	0.0005	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	0.05	0.04	22	0.04	0.04	0
Perfluorohexanoic acid (PFHxA)	µg/L	0.0005	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	0.37	0.34	8	0.27	0.30	11
Perfluorononanoic acid (PFNA)	µg/L	0.0005	<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
Perfluorooctanoic acid (PFOA)	µg/L	0.0005	<0.01	<0.01	0	<0.01	<0.01	0	<0.01	<0.01	0	0.09	0.11	20	0.09	0.09	0
Perfluoropentanoic acid (PFPeA)	µg/L	0.0005	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0	0.11	0.12	9	0.03	0.04	29
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.0005	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.01	0
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.0005	<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
Perfluoroundecanoic acid (PFUnDA)	µg/L	0.0005	<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
PFAS - Perfluoroalkyl Sulfonamide																	
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	µg/L	0.001	<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	0.0005	<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
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	µg/L	0.001	<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	0.001	<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	0.0005	<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
N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	µg/L	0.001	<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 (FOSA)	µg/L	0.0005	<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
PFAS - Fluorotelomer Sulfonic Acids																	
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	µg/L	0.001	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.01	0
6:2 Fluorotelomer Sulfonate (6:2 FTS)	µg/L	0.001	<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	0.001	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.01	0
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	µg/L	0.001	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.01	0

***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			Normal	Field_D		Normal	Interlab_D		Normal	Field_D		Normal	Interlab_D		Normal	Field_D	
Location Code			0021_MW139	0021_MW139		0021_MW139	0021_MW139		0021_MW153	0021_MW153		0021_MW153	0021_MW153		0021_MW114	0021_MW114	
Field ID			0021_MW139_250403	0021_QC108_250403		0021_MW139_250403	0021_QC208_250403		0021_MW153_250404	0021_QC140_250404		0021_MW153_250404	0021_QC240_250404		0021_MW114_250404	0021_QC109_250404	
Date			03 Apr 2025	03 Apr 2025		03 Apr 2025	03 Apr 2025		04 Apr 2025	04 Apr 2025		04 Apr 2025	04 Apr 2025		04 Apr 2025	04 Apr 2025	
Lab Report Number			ES2510113	ES2510113		ES2510113	1210052		ES2510113	ES2510113		ES2510113	1210052		ES2510113	ES2510113	
Matrix Type			Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD
	Unit	EQL															
PFAS - Perfluoroalkyl Sulfonic Acids																	
Perfluorobutane sulfonic acid (PFBS)	µg/L	0.0005	<0.0005	<0.0005	0	<0.0005	<0.001	0	0.39	0.37	5	0.39	0.42	7	<0.02	<0.02	0
Perfluorodecanesulfonic acid (PFDS)	µg/L	0.0005	<0.0005	<0.0005	0	<0.0005	<0.001	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluoroheptane sulfonic acid (PFHpS)	µg/L	0.0005	<0.0005	<0.0005	0	<0.0005	<0.001	0	0.91	0.81	12	0.91	0.92	1	<0.02	<0.02	0
Perfluorooctane sulfonic acid (PFOS)	µg/L	0.0001	0.0004	0.0004	0	0.0004	0.0006	40	16.1	18.5	14	16.1	18	11	<0.01	<0.01	0
Perfluoropentane sulfonic acid (PFPeS)	µg/L	0.0005	<0.0005	<0.0005	0	<0.0005	<0.001	0	0.70	0.60	15	0.70	0.61	14	<0.02	<0.02	0
Perfluorohexane sulfonic acid (PFHxS)	µg/L	0.0005	<0.0005	<0.0005	0	<0.0005	<0.001	0	8.84	6.36	**33**	8.84	7.6	15	<0.01	<0.01	0
PFAS - Perfluoroalkyl Carboxylic Acids																	
Perfluorobutanoic acid (PFBA)	µg/L	0.002	<0.002	<0.002	0	<0.002	<0.005	0	<0.1	<0.1	0	<0.1	0.10	0	<0.1	<0.1	0
Perfluorodecanoic acid (PFDA)	µg/L	0.0005	<0.0005	<0.0005	0	<0.0005	<0.001	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluorododecanoic acid (PFDoDA)	µg/L	0.0005	<0.0005	<0.0005	0	<0.0005	<0.001	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluoroheptanoic acid (PFHpA)	µg/L	0.0005	<0.0005	<0.0005	0	<0.0005	<0.001	0	0.15	0.12	22	0.15	0.15	0	<0.02	<0.02	0
Perfluorohexanoic acid (PFHxA)	µg/L	0.0005	<0.0005	<0.0005	0	<0.0005	<0.001	0	0.86	0.78	10	0.86	0.87	1	<0.02	<0.02	0
Perfluorononanoic acid (PFNA)	µg/L	0.0005	<0.0005	<0.0005	0	<0.0005	<0.001	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluorooctanoic acid (PFOA)	µg/L	0.0005	<0.0005	<0.0005	0	<0.0005	<0.001	0	0.58	0.71	20	0.58	0.57	2	<0.01	<0.01	0
Perfluoropentanoic acid (PFPeA)	µg/L	0.0005	<0.0005	<0.0005	0	<0.0005	<0.001	0	0.17	0.18	6	0.17	0.17	0	<0.02	<0.02	0
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.0005	<0.0005	<0.0005	0	<0.0005	<0.001	0	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.0005	<0.0005	<0.0005	0	<0.0005	<0.001	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluoroundecanoic acid (PFUnDA)	µg/L	0.0005	<0.0005	<0.0005	0	<0.0005	<0.001	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	0.001	<0.001	<0.001	0	<0.001	<0.005	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	µg/L	0.0005	<0.0005	<0.0005	0	<0.0005	<0.005	0	<0.02	<0.02	0	<0.02	<0.05	0	<0.02	<0.02	0
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	µg/L	0.001	<0.001	<0.001	0	<0.001	<0.005	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
N-Methyl perfluorooctane sulfonamide (MeFOSA)	µg/L	0.001	<0.001	<0.001	0	<0.001	<0.005	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	µg/L	0.0005	<0.0005	<0.0005	0	<0.0005	<0.005	0	<0.02	<0.02	0	<0.02	<0.05	0	<0.02	<0.02	0
N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	µg/L	0.001	<0.001	<0.001	0	<0.001	<0.005	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
Perfluorooctane sulfonamide (FOSA)	µg/L	0.0005	<0.0005	<0.0005	0	<0.0005	<0.005	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	0.001	<0.001	<0.001	0	<0.001	<0.001	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	0.001	<0.001	<0.001	0	<0.001	<0.005	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	0.001	<0.001	<0.001	0	<0.001	<0.001	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	0.001	<0.001	<0.001	0	<0.001	<0.001	0	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0

***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			Normal	Interlab_D		Normal	Field_D		Normal	Interlab_D		0020_MW070	0020_MW070	
Location Code			0021_MW114	0021_MW114		0021_OTH001	0021_OTH001		0021_OTH001	0021_OTH001		24 Apr 2025	24 Apr 2025	
Field ID			0021_MW114_250404	0021_QC209_250404		0021_OTH001_250407	0021_QC157_250407		0021_OTH001_250407	0021_QC257_250407		0020_MW070_250424	0020_QC120_250424	
Date			04 Apr 2025	04 Apr 2025		07 Apr 2025	07 Apr 2025		07 Apr 2025	07 Apr 2025		Normal	Field_D	
Lab Report Number			ES2510113	1210052		ES2510113	ES2510113		ES2510113	1210052		ES2512752	ES2512752	
Matrix Type			Water	Water	RPD	Water	Water	RPD	Water	Water	RPD	Water	Water	RPD
	Unit	EQL												
PFAS - Perfluoroalkyl Sulfonic Acids														
Perfluorobutane sulfonic acid (PFBS)	µg/L	0.0005	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluorodecanesulfonic acid (PFDS)	µg/L	0.0005	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluoroheptane sulfonic acid (PFHpS)	µg/L	0.0005	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluorooctane sulfonic acid (PFOS)	µg/L	0.0001	<0.01	<0.01	0	0.06	0.06	0	0.06	0.06	0	0.50	0.49	2
Perfluoropentane sulfonic acid (PFPeS)	µg/L	0.0005	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluorohexane sulfonic acid (PFHxS)	µg/L	0.0005	<0.01	<0.01	0	0.02	0.01	67	0.02	0.05	86	0.15	0.13	14
PFAS - Perfluoroalkyl Carboxylic Acids														
Perfluorobutanoic acid (PFBA)	µg/L	0.002	<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	0.0005	<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	0.0005	<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	0.0005	<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	0.0005	<0.02	<0.01	0	<0.02	<0.02	0	<0.02	<0.01	0	<0.02	<0.02	0
Perfluorononanoic acid (PFNA)	µg/L	0.0005	<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	0.0005	<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	0.0005	<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	0.0005	<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	0.0005	<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	0.0005	<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	0.001	<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	0.0005	<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	0.001	<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	0.001	<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	0.0005	<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	0.001	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
Perfluorooctane sulfonamide (FOSA)	µg/L	0.0005	<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	0.001	<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	0.001	<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	0.001	<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	0.001	<0.05	<0.01	0	<0.05	<0.05	0	<0.05	<0.01	0	<0.05	<0.05	0

***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	Trip_B	Trip_B
Field ID			0020_QC500_250331	0020_QC501_250401	0021_QC502_250401
Date			07 Apr 2025	07 Apr 2025	01 Apr 2025
Lab Report Number			ES2510618	ES2510618	ES2510623
Matrix Type			Water	Water	Water
	Unit	EQL			
PFAS - Perfluoroalkyl Sulfonic Acids					
Perfluorobutane sulfonic acid (PFBS)	µg/L	0.02	<0.02	<0.02	<0.02
Perfluorodecanesulfonic acid (PFDS)	µg/L	0.02	<0.02	<0.02	<0.02
Perfluoroheptane sulfonic acid (PFHpS)	µg/L	0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	µg/L	0.01	<0.01	<0.01	<0.01
Perfluoropentane sulfonic acid (PFPeS)	µg/L	0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	µg/L	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
Perfluorodecanoic acid (PFDA)	µg/L	0.02	<0.02	<0.02	<0.02
Perfluorododecanoic acid (PFDoDA)	µg/L	0.02	<0.02	<0.02	<0.02
Perfluoroheptanoic acid (PFHpA)	µg/L	0.02	<0.02	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	µg/L	0.02	<0.02	<0.02	<0.02
Perfluorononanoic acid (PFNA)	µg/L	0.02	<0.02	<0.02	<0.02
Perfluorooctanoic acid (PFOA)	µg/L	0.01	<0.01	<0.01	<0.01
Perfluoropentanoic acid (PFPeA)	µg/L	0.02	<0.02	<0.02	<0.02
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.05	<0.05	<0.05	<0.05
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.02	<0.02	<0.02	<0.02
Perfluoroundecanoic acid (PFUnDA)	µg/L	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
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	µg/L	0.02	<0.02	<0.02	<0.02
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	µg/L	0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamide (MeFOSA)	µg/L	0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	µg/L	0.02	<0.02	<0.02	<0.02
N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	µg/L	0.05	<0.05	<0.05	<0.05
Perfluorooctane sulfonamide (FOSA)	µg/L	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
6:2 Fluorotelomer Sulfonate (6:2 FTS)	µg/L	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
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	µg/L	0.05	<0.05	<0.05	<0.05
PFAS - Sums					
PFAS (Sum of Total)	µg/L	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
Sum of PFHxS and PFOS	µg/L	0.01	<0.01	<0.01	<0.01

Sample Type			Trip_B	Trip_B
Field ID			0020_QC504_250331	0021_QC505_250331
Date			07 Apr 2025	31 Mar 2025
Lab Report Number			ES2510618	ES2510623
Matrix Type			Soil	Soil
	Unit	EQL		
PFAS - Perfluoroalkyl Sulfonic Acids				
Perfluorobutane sulfonic acid (PFBS)	mg/kg	0.0002	<0.0002	<0.0002
Perfluorodecanesulfonic acid (PFDS)	mg/kg	0.0002	<0.0002	<0.0002
Perfluoroheptane sulfonic acid (PFHpS)	mg/kg	0.0002	<0.0002	<0.0002
Perfluorooctane sulfonic acid (PFOS)	mg/kg	0.0002	<0.0002	<0.0002
Perfluoropentane sulfonic acid (PFPeS)	mg/kg	0.0002	<0.0002	<0.0002
Perfluorohexane sulfonic acid (PFHxS)	mg/kg	0.0002	<0.0002	<0.0002
PFAS - Perfluoroalkyl Carboxylic Acids				
Perfluorobutanoic acid (PFBA)	mg/kg	0.001	<0.001	<0.001
Perfluorodecanoic acid (PFDA)	mg/kg	0.0002	<0.0002	<0.0002
Perfluorododecanoic acid (PFDoDA)	mg/kg	0.0002	<0.0002	<0.0002
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0002	<0.0002	<0.0002
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0002	<0.0002	<0.0002
Perfluorononanoic acid (PFNA)	mg/kg	0.0002	<0.0002	<0.0002
Perfluorooctanoic acid (PFOA)	mg/kg	0.0002	<0.0002	<0.0002
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0002	<0.0002	<0.0002
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0005	<0.0005	<0.0005
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0002	<0.0002	<0.0002
Perfluoroundecanoic acid (PFUnDA)	mg/kg	0.0002	<0.0002	<0.0002
PFAS - Perfluoroalkyl Sulfonamide				
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	mg/kg	0.0005	<0.0005	<0.0005
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	mg/kg	0.0002	<0.0002	<0.0002
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	mg/kg	0.0005	<0.0005	<0.0005
N-Methyl perfluorooctane sulfonamide (MeFOSA)	mg/kg	0.0005	<0.0005	<0.0005
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	mg/kg	0.0002	<0.0002	<0.0002
N-Methyl perfluorooctane sulfonamidoethanol (MEFOSE)	mg/kg	0.0005	<0.0005	<0.0005
Perfluorooctane sulfonamide (FOSA)	mg/kg	0.0002	<0.0002	<0.0002
PFAS - Fluorotelomer Sulfonic Acids				
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	mg/kg	0.0005	<0.0005	<0.0005
6:2 Fluorotelomer Sulfonate (6:2 FTS)	mg/kg	0.0005	<0.0005	<0.0005
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	mg/kg	0.0005	<0.0005	<0.0005
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	mg/kg	0.0005	<0.0005	<0.0005
PFAS - Sums				
PFAS (Sum of Total)	mg/kg	0.0002	<0.0002	<0.0002
PFAS (Sum of Total)(WA DER List)	mg/kg	0.0002	<0.0002	<0.0002
Sum of PFHxS and PFOS	mg/kg	0.0002	<0.0002	<0.0002

Sample Type			Rinsate	Rinsate	Rinsate	Rinsate	Rinsate	Rinsate	Rinsate	Rinsate	Rinsate	Rinsate	Rinsate
Field ID			0020_QC330_250331	0020_QC350_2503331	0020_QC380_250401	0021_QC300_250401	0021_QC301_250402	0021_QC302_250403	0021_QC304_250424	0021_QC331_250401	0021_QC332_250402	0021_QC333_250403	0021_QC334_250404
Date			07 Apr 2025	07 Apr 2025	07 Apr 2025	01 Apr 2025	02 Apr 2025	03 Apr 2025	24 Apr 2025	01 Apr 2025	02 Apr 2025	03 Apr 2025	04 Apr 2025
Lab Report Number			ES2510618	ES2510618	ES2510618	ES2510623	ES2510623	ES2510623	ES2512435	ES2510623	ES2510623	ES2510623	ES2510623
Matrix Type			Water	Water	Water	Water	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	<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	<0.02	<0.02	<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	<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	<0.01	<0.01	<0.01
Perfluoropentane sulfonic acid (PFPeS)	µg/L	0.02	<0.02	<0.02	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<0.05	<0.05	<0.05
Perfluorooctane sulfonamide (FOSA)	µg/L	0.02	<0.02	<0.02	<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	<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	<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	<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	<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	<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	<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	<0.01	<0.01	<0.01

Sample Type			Rinsate	Rinsate	Rinsate	Rinsate	Rinsate	Rinsate	Rinsate	Rinsate	Rinsate	Rinsate	Rinsate
Field ID			0021_QC335_250407	0021_QC351_250401	0021_QC352_250402	0021_QC353_250402	0021_QC354_250403	0021_QC355_250404	0021_QC356_250404	0021_QC357_250407	0021_QC381_250403	0021_QC382_250404	0021_QC383_250407
Date			07 Apr 2025	01 Apr 2025	02 Apr 2025	02 Apr 2025	03 Apr 2025	04 Apr 2025	04 Apr 2025	07 Apr 2025	03 Apr 2025	04 Apr 2025	07 Apr 2025
Lab Report Number			ES2510623	ES2510623	ES2510623	ES2510623	ES2510623	ES2510623	ES2510623	ES2510623	ES2510623	ES2510623	ES2510623
Matrix Type			Water	Water	Water	Water	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	<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	<0.02	<0.02	<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	<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	<0.01	<0.01	<0.01
Perfluoropentane sulfonic acid (PFPeS)	µg/L	0.02	<0.02	<0.02	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<0.05	<0.05	<0.05
Perfluorooctane sulfonamide (FOSA)	µg/L	0.02	<0.02	<0.02	<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	<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	<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	<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	<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	<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	<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	<0.01	<0.01	<0.01

Appendix D

Equipment calibration

WAMSCIENTIFIC
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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	01-16DM2403191FR
Client Name	Jarrad Mawbey (GHD)
Project Number	12626622

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_2O, 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_2O	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	25/03/2025
Calibration Due	25/09/2025

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

WAMSCIENTIFIC
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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	Jarrad Mawbey (GHD)
Project Number	12626622

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_2O, 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_2O	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	25/03/2025
Calibration Due	25/09/2025

WAMSCIENTIFIC
Your water and air monitoring equipment specialists

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

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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	01-8151
Client Name	Jarrad Mawbey (GHD)
Project Number	12626622

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_2O, 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_2O	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	25/03/2025
Calibration Due	25/09/2025

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Your water and air monitoring equipment specialists

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

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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	01-8895
Client Name	Jarrad Mawbey (GHD)
Project Number	12626622

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_2O, 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_2O	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	25/03/2025
Calibration Due	25/09/2025

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

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Certificate of Service and Calibration
Water Quality Meter
YSI Professional Plus

Company Name	WAM Scientific
Office Address	26 Bungarra Crescent, Chipping Norton NSW 2170
Phone Number	+61 405 241 484
Contact Name	William Pak
Instrument	YSI Pro Quatro Water Quality Meter w/ 1m Quatro Cable
Serial Number	20B122031
Client Name	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 ± 50 mV
pH millivolts for pH 4.00	Calibration	✓	pH 4 mV range +165 to +180 from 7 buffer mV value
pH slope	Calibration	✓	Range between 55 to 60 mV/pH (ideal value 59 mV)
Response time < 90 seconds	Calibration	✓	Responds to correct value within 90 seconds
ORP Probe	Condition/Calibration	✓	Calibrated and conforms to manufacturer's specs
ORP Reading	Calibration	✓	Within ± 80 mV of reference Zobell Reading
Response time < 90 seconds	Calibration	✓	Responds to correct value within 90 seconds
Conductivity/Temp Probe	Condition/Calibration	✓	Calibrated and conforms to manufacturer's specs
Conductivity Cell	Calibration	✓	Conductivity cell constant 5.0 ± 1.0 in GLP file
Clean Sensor Readings	Calibration	✓	Clean sensor reads less than 3 uS/cm in dry air
Dissolved Oxygen Probe	Condition/Calibration	✓	Calibrated and conforms to manufacturer's specs
DO Cap	Condition/Calibration	✓	1.25 mil PE membrane (yellow membrane)
DO Sensor in Use	Condition	✓	Polarographic DO sensor
DO Sensor Value	Calibration	✓	(min 4.31 uA - max 8.00 uA) Avg 6.15 uA

Instrument Readings

Parameter	Standard Used	Reference No.	Calibration Value	Observed	Actual	Units
Temperature	Centre 370 Thermometer	Room Temp.	23.8	242.8	23.8	°C
pH	pH 4.00	417183	4.01	3.97	4.01	pH
pH	pH 7.00	419528	7.00	6.97	7.00	pH
Conductivity	2760 µs/cm at 25°C	399819	2760	2739	2760	µs/cm
ORP (Ref. check only)	Zobell A & B	420448/418958	231.6	218.7	231.6	mV
Zero Dissolved O_2	$NaSO_3$ in Distilled H_2O	426184	0.0	-0.3	0.0	%
100% Dissolved O_2	100% Air Saturated H_2O	Fresh Air	100.0	103.8	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	25/03/2025
Calibration Due	25/09/2025

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

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Certificate of Service and Calibration
Water Quality Meter
YSI Professional Plus

Company Name	WAM Scientific
Office Address	26 Bungarra Crescent, Chipping Norton NSW 2170
Phone Number	+61 405 241 484
Contact Name	William Pak
Instrument	YSI Pro Quatro Water Quality Meter w/ 1m Quatro Cable
Serial Number	20B122031
Client Name	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 ± 50 mV
pH millivolts for pH 4.00	Calibration	✓	pH 4 mV range +165 to +180 from 7 buffer mV value
pH slope	Calibration	✓	Range between 55 to 60 mV/pH (ideal value 59 mV)
Response time < 90 seconds	Calibration	✓	Responds to correct value within 90 seconds
ORP Probe	Condition/Calibration	✓	Calibrated and conforms to manufacturer's specs
ORP Reading	Calibration	✓	Within ± 80 mV of reference Zobell Reading
Response time < 90 seconds	Calibration	✓	Responds to correct value within 90 seconds
Conductivity/Temp Probe	Condition/Calibration	✓	Calibrated and conforms to manufacturer's specs
Conductivity Cell	Calibration	✓	Conductivity cell constant 5.0 ± 1.0 in GLP file
Clean Sensor Readings	Calibration	✓	Clean sensor reads less than 3 uS/cm in dry air
Dissolved Oxygen Probe	Condition/Calibration	✓	Calibrated and conforms to manufacturer's specs
DO Cap	Condition/Calibration	✓	1.25 mil PE membrane (yellow membrane)
DO Sensor in Use	Condition	✓	Polarographic DO sensor
DO Sensor Value	Calibration	✓	(min 4.31 uA - max 8.00 uA) Avg 6.15 uA

Instrument Readings

Parameter	Standard Used	Reference No.	Calibration Value	Observed	Actual	Units
Temperature	Centre 370 Thermometer	Room Temp.	23.8	24.3	23.8	°C
pH	pH 4.00	417183	4.01	4.10	4.01	pH
pH	pH 7.00	419528	7.00	7.07	7.00	pH
Conductivity	2760 µs/cm at 25°C	399819	2760	2777	2760	µs/cm
ORP (Ref. check only)	Zobell A & B	420448/418958	231.6	234.2	231.6	mV
Zero Dissolved O_2	$NaSO_3$ in Distilled H_2O	426184	0.0	-0.6	0.0	%
100% Dissolved O_2	100% Air Saturated H_2O	Fresh Air	100.0	107.3	100.0	%

Declaration

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

Calibrated By	William Pak
Calibration Date	25/03/2025
Calibration Due	25/09/2025

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

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Certificate of Service and Calibration
Water Quality Meter
YSI Professional Plus

Company Name	WAM Scientific
Office Address	26 Bungarra Crescent, Chipping Norton NSW 2170
Phone Number	+61 405 241 484
Contact Name	William Pak
Instrument	YSI Pro Quatro Water Quality Meter w/ 1m Quatro Cable
Serial Number	21C100008
Client Name	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 ± 50 mV
pH millivolts for pH 4.00	Calibration	✓	pH 4 mV range +165 to +180 from 7 buffer mV value
pH slope	Calibration	✓	Range between 55 to 60 mV/pH (ideal value 59 mV)
Response time < 90 seconds	Calibration	✓	Responds to correct value within 90 seconds
ORP Probe	Condition/Calibration	✓	Calibrated and conforms to manufacturer's specs
ORP Reading	Calibration	✓	Within ± 80 mV of reference Zobell Reading
Response time < 90 seconds	Calibration	✓	Responds to correct value within 90 seconds
Conductivity/Temp Probe	Condition/Calibration	✓	Calibrated and conforms to manufacturer's specs
Conductivity Cell	Calibration	✓	Conductivity cell constant 5.0 ± 1.0 in GLP file
Clean Sensor Readings	Calibration	✓	Clean sensor reads less than 3 uS/cm in dry air
Dissolved Oxygen Probe	Condition/Calibration	✓	Calibrated and conforms to manufacturer's specs
DO Cap	Condition/Calibration	✓	1.25 mil PE membrane (yellow membrane)
DO Sensor in Use	Condition	✓	Polarographic DO sensor
DO Sensor Value	Calibration	✓	(min 4.31 uA - max 8.00 uA) Avg 6.15 uA

Instrument Readings

Parameter	Standard Used	Reference No.	Calibration Value	Observed	Actual	Units
Temperature	Centre 370 Thermometer	Room Temp.	23.8	23.0	23.8	°C
pH	pH 4.00	417183	4.01	4.04	4.01	pH
pH	pH 7.00	419528	7.00	7.05	7.00	pH
Conductivity	2760 µs/cm at 25°C	399819	2760	2823	2760	µs/cm
ORP (Ref. check only)	Zobell A & B	420448/418958	231.6	228.1	231.6	mV
Zero Dissolved O_2	$NaSO_3$ in Distilled H_2O	426184	0.0	-0.3	0.0	%
100% Dissolved O_2	100% Air Saturated H_2O	Fresh Air	100.0	102.5	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	25/03/2025
Calibration Due	25/09/2025

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

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Certificate of Service and Calibration
Water Quality Meter
YSI Professional Plus

Company Name	WAM Scientific
Office Address	26 Bungarra Crescent, Chipping Norton NSW 2170
Phone Number	+61 405 241 484
Contact Name	William Pak
Instrument	YSI Pro Quatro Water Quality Meter w/ 1m Quatro Cable
Serial Number	22H104712
Client Name	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 ± 50 mV
pH millivolts for pH 4.00	Calibration	✓	pH 4 mV range +165 to +180 from 7 buffer mV value
pH slope	Calibration	✓	Range between 55 to 60 mV/pH (ideal value 59 mV)
Response time < 90 seconds	Calibration	✓	Responds to correct value within 90 seconds
ORP Probe	Condition/Calibration	✓	Calibrated and conforms to manufacturer's specs
ORP Reading	Calibration	✓	Within ± 80 mV of reference Zobell Reading
Response time < 90 seconds	Calibration	✓	Responds to correct value within 90 seconds
Conductivity/Temp Probe	Condition/Calibration	✓	Calibrated and conforms to manufacturer's specs
Conductivity Cell	Calibration	✓	Conductivity cell constant 5.0 ± 1.0 in GLP file
Clean Sensor Readings	Calibration	✓	Clean sensor reads less than 3 uS/cm in dry air
Dissolved Oxygen Probe	Condition/Calibration	✓	Calibrated and conforms to manufacturer's specs
DO Cap	Condition/Calibration	✓	1.25 mil PE membrane (yellow membrane)
DO Sensor in Use	Condition	✓	Polarographic DO sensor
DO Sensor Value	Calibration	✓	(min 4.31 uA - max 8.00 uA) Avg 6.15 uA

Instrument Readings

Parameter	Standard Used	Reference No.	Calibration Value	Observed	Actual	Units
Temperature	Centre 370 Thermometer	Room Temp.	23.8	24.2	23.8	°C
pH	pH 4.00	417183	4.01	4.00	4.01	pH
pH	pH 7.00	419528	7.00	7.00	7.00	pH
Conductivity	2760 µs/cm at 25°C	399819	2760	2840	2760	µs/cm
ORP (Ref. check only)	Zobell A & B	420448/418958	231.6	238.1	231.6	mV
Zero Dissolved O_2	$NaSO_3$ in Distilled H_2O	426184	0.0	1.6	0.0	%
100% Dissolved O_2	100% Air Saturated H_2O	Fresh Air	100.0	90.3	100.0	%

Declaration

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

Calibrated By	William Pak
Calibration Date	25/03/2025
Calibration Due	25/09/2025

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

Certificate of Service and Calibration

Bladder Pump

QED MP15 Micropurge Kit

Company Name	WAM Scientific
Office Address	26 Bungarra Crescent, Chipping Norton NSW 2170
Phone Number	+61 405 241 484
Contact Name	William Pak
Instrument	QED MP15 Kit
Serial Number	Sample Pro Pump: 144590
Serial Number	MP15 Backpack: 1731
Client Name	Jarrad Mawbey (GHD Pty Ltd)
Project Number	12626622
Comments	2x Spare CO2 Bottles

Instrument Check			
Item	Test	Test Passed	Comments
MP15 Backpack Controller	Operation	✓	Controller operational
Gas Regulator	Condition	✓	No damage, good condition
Wrench and Tube Cutter	Condition	✓	Attached to the controller
Blue Coiled Hose	Condition	✓	No tears, clean, good condition
Tube Connection Fitting	Condition	✓	No damage
Black Canvas Bag	Condition	✓	No damage, clean
Sample Pro Pump	Condition	✓	No damage, decontaminated
Bladder	Condition	✓	1x New bladder included free of charge
Pump Fittings	Condition	✓	No damage, good condition
CO2 Gas Bottle	Check & Test	✓	1x CO2 bottle included free of charge
Kit Operation	Operation	✓	MP15 kit fully operational
Instructional Manual	-	✓	User manual included

Inclusions

The MP15 Kit should include the following items:

- QED MP15 Backpack Controller, Blue Coiled Hose with Tube Connection Fitting, Wrench and Tube Cutter, Sample Pro Pump, 1x CO2 gas bottle fitted with the MP15 Backpack, Wire Cable Hand Reel and spares/accessories box
- Additional CO2 gas bottles will be supplied upon request at an additional cost

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 pump has been decontaminated and cleaned upon return from the previous hire and is in good working order.

Checked By	William Pak
Calibration Date	26/03/2025
Calibration Due	26/09/2025

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

Certificate of Service and Calibration

Bladder Pump

QED MP15 Micropurge Kit

Company Name	WAM Scientific
Office Address	26 Bungarra Crescent, Chipping Norton NSW 2170
Phone Number	+61 405 241 484
Contact Name	William Pak
Instrument	QED MP15 Kit
Serial Number	Sample Pro Pump: 12861
Serial Number	MP15 Backpack: 1809
Client Name	Jarrad Mawbey (GHD Pty Ltd)
Project Number	12626622
Comments	2x Spare CO2 Bottles

Instrument Check			
Item	Test	Test Passed	Comments
MP15 Backpack Controller	Operation	✓	Controller operational
Gas Regulator	Condition	✓	No damage, good condition
Wrench and Tube Cutter	Condition	✓	Attached to the controller
Blue Coiled Hose	Condition	✓	No tears, clean, good condition
Tube Connection Fitting	Condition	✓	No damage
Black Canvas Bag	Condition	✓	No damage, clean
Sample Pro Pump	Condition	✓	No damage, decontaminated
Bladder	Condition	✓	1x New bladder included free of charge
Pump Fittings	Condition	✓	No damage, good condition
CO2 Gas Bottle	Check & Test	✓	1x CO2 bottle included free of charge
Kit Operation	Operation	✓	MP15 kit fully operational
Instructional Manual	-	✓	User manual included

Inclusions

The MP15 Kit should include the following items:

- QED MP15 Backpack Controller, Blue Coiled Hose with Tube Connection Fitting, Wrench and Tube Cutter, Sample Pro Pump, 1x CO2 gas bottle fitted with the MP15 Backpack, Wire Cable Hand Reel and spares/accessories box
- Additional CO2 gas bottles will be supplied upon request at an additional cost

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 pump has been decontaminated and cleaned upon return from the previous hire and is in good working order.

Checked By	William Pak
Calibration Date	26/03/2025
Calibration Due	26/09/2025

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

WAMSCIENTIFIC
Your water and air monitoring equipment specialists

Certificate of Service and Calibration
Peristaltic Pump
Geotech Geopump 2

Company Name	WAM Scientific
Office Address	26 Bungarra Crescent, Chipping Norton NSW 2170
Phone Number	+61 405 241 484
Contact Name	William Pak
Instrument	Geotech Geopump Peristaltic Pump
Cable Length	4.5m
Serial Number	Pump: 6574
Serial Number	Head: -
Client Name	Jarrad Mawbey (GHD)
Project Number	12626622

Instrument Check			
Item	Test	Test Passed	Comments
2 x 12V Batteries	Klein Tools MM300 Multimeter	✓	Both batteries reading above 12V
Battery Terminals	Check	✓	No damage
Charger	Condition/Check	✓	Functioning
Cabling	Check	✓	No damage
Alligator Clips	Check	✓	Protected, no damage
Casing	Check	✓	Clean, no damage
Handle	Check	✓	No damage
Pump Head	Check	✓	EZ2 Head, no damage
Pump Condition	Decontamination	✓	Decontaminated
Pump Operation	Operation	✓	Peristaltic pump functional
Pump Tubing	Replacement	✓	New 0.5m ¼" OD LDPE silicon tubing
Pump Speed	Operation	✓	Speed knob functional

Inclusions
2 x Sealed lead acid 12V batteries included 1x Carry case for 12V batteries included 1x Intrinsically safe charger (clips) included

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 pump has been decontaminated and cleaned upon return from the previous hire and is in good working order.

Checked By	William Pak
Calibration Date	25/03/2025
Calibration Due	25/09/2025

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Your water and air monitoring equipment specialists

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

WAMSCIENTIFIC
Your water and air monitoring equipment specialists

Certificate of Service and Calibration
Peristaltic Pump
Geotech Geopump 2

Company Name	WAM Scientific
Office Address	26 Bungarra Crescent, Chipping Norton NSW 2170
Phone Number	+61 405 241 484
Contact Name	William Pak
Instrument	Geotech Geopump Peristaltic Pump
Cable Length	4.5m
Serial Number	Pump: 6737
Serial Number	Head: -
Client Name	Jarrad Mawbey (GHD)
Project Number	12626622

Instrument Check			
Item	Test	Test Passed	Comments
2 x 12V Batteries	Klein Tools MM300 Multimeter	✓	Both batteries reading above 12V
Battery Terminals	Check	✓	No damage
Charger	Condition/Check	✓	Functioning
Cabling	Check	✓	No damage
Alligator Clips	Check	✓	Protected, no damage
Casing	Check	✓	Clean, no damage
Handle	Check	✓	No damage
Pump Head	Check	✓	EZ2 Head, no damage
Pump Condition	Decontamination	✓	Decontaminated
Pump Operation	Operation	✓	Peristaltic pump functional
Pump Tubing	Replacement	✓	New 0.5m ¼" OD LDPE silicon tubing
Pump Speed	Operation	✓	Speed knob functional

Inclusions
2 x Sealed lead acid 12V batteries included 1x Carry case for 12V batteries included 1x Intrinsically safe charger (clips) included

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 pump has been decontaminated and cleaned upon return from the previous hire and is in good working order.

Checked By	William Pak
Calibration Date	25/03/2025
Calibration Due	25/09/2025

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E: accounts@wamscientific.com.au

Appendix E

Laboratory certificates and chain of custody documents

SAMPLES RECEIVED WITHOUT COC

CLIENT: GHD	CARRIER:
PROJECT / QUOTE: 12626622	CONNOTE #:
CONTACT NAME:	AWB #:
CONTACT NUMBER:	# OF ESKIES: 7 SECURITY SEAL: Y N N/A
SAMPLER NAME:	TYPE OF ESKIES: Large
SAMPLER NUMBER:	ESKY NUMBERS: TUE244 - ~~244~~250
SAMPLES RECEIVED BY:	# OF SAMPLES:
DATE/TIME RECEIVED: 8/4/25 1420. CLIENT SERVICES NOTIFIED BY:	TEMPERATURE: 5.1°C, 5.0°C, 3.2°C

Environmental Division
Sydney
Work Order Reference
ES2510113

Telephone : +61-2-8784 8555

LAB ID	SAMPLE DETAILS: SAMPLE ID	DATE	MATRIX	NUMBER OF CONTAINERS	ADDITIONAL INFORMATION / COMMENTS:
					OTHER INFORMATION: ☐ MICRO ☐ BIOSECURITY ☐ BROKEN CONTAINERS ☐ COC EMAILED ☐ ALS COMPASS
1	0021_MW101_250404	4/4/25	W		
2	0020_MW10_250331	31/3/25	W		
3					
4					
5					

CORRESPONDENCE (DATE, INITIALS - DETAILS OF CORRESPONDENCE):

SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order	: **ES2510113**		
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
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	: 12626622	Page	: 1 of 5
Order number	: 12626622	Quote number	: ES2023GHDSER0026 (ES23GHDSER0026)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: ----		
Sampler	: Jarrad Mawbey		

Dates

Date Samples Received	: 08-Apr-2025 14:20	Issue Date	: 29-Apr-2025
Client Requested Due Date	: 29-Apr-2025	Scheduled Reporting Date	: **29-Apr-2025**

Delivery Details

Mode of Delivery	: Undefined	Security Seal	: Not Available
No. of coolers/boxes	: 7	Temperature	: 5.1, 5.0, 3.2 - Ice present
Receipt Detail	:	No. of samples received / analysed	: 87 / 87

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
- Samples QC202, QC203,QC204, QC205, QC206, QC208, QC209, QC210, QC211, QC234, QC235, QC236, QC239, QC240, QC241, QC254, QC255, QC256 and QC257 have been forwarded to Eurofins.
- Split workorder - Remaining samples have been logged under ES2510622 and ES2510623.
- **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-SD PFAS - Full Suite (30 analytes) in Sediments
ES2510113-070	01-Apr-2025 13:42	0021_QC104_250401	✓	✓
ES2510113-076	04-Apr-2025 10:45	0021_QC110_250404	✓	✓
ES2510113-077	04-Apr-2025 16:25	0021_QC111_250404	✓	✓
ES2510113-079	02-Apr-2025 00:00	0021_QC135_250402	✓	✓
ES2510113-081	03-Apr-2025 14:20	0021_QC139_250403	✓	✓
ES2510113-083	04-Apr-2025 13:28	0021_QC141_250404	✓	✓

Matrix: **WATER**

Laboratory sample ID	Sampling date / time	Sample ID	WATER - EP231X PFAS - Full Suite (31 analytes)	WATER - EP231X-ST PFAS - Full Suite (30 analytes) Super Trace
ES2510113-001	02-Apr-2025 13:08	0021_MW018_250402	✓	
ES2510113-002	02-Apr-2025 08:34	0021_MW020_250402	✓	
ES2510113-003	01-Apr-2025 16:23	0021_MW021_250401	✓	
ES2510113-004	01-Apr-2025 13:01	0021_MW022_250401	✓	
ES2510113-005	01-Apr-2025 12:12	0021_MW024_250401	✓	
ES2510113-006	02-Apr-2025 11:03	0021_MW025_250402	✓	
ES2510113-007	07-Apr-2025 10:25	0021_MW026_250407	✓	
ES2510113-008	02-Apr-2025 14:12	0021_MW028_250402	✓	
ES2510113-009	03-Apr-2025 09:24	0021_MW030_250403	✓	
ES2510113-010	01-Apr-2025 15:44	0021_MW060_250401	✓	
ES2510113-011	03-Apr-2025 14:51	0021_MW063_250403	✓	
ES2510113-012	03-Apr-2025 13:44	0021_MW064_250403	✓	
ES2510113-013	03-Apr-2025 12:32	0021_MW065_250403	✓	
ES2510113-014	07-Apr-2025 10:18	0021_MW070_250407	✓	
ES2510113-015	07-Apr-2025 11:34	0021_MW071_250407	✓	
ES2510113-016	07-Apr-2025 10:43	0021_MW072_250407	✓	
ES2510113-017	04-Apr-2025 08:59	0021_MW101_250404	✓	

			WATER - EP231X PFAS - Full Suite (31 analytes)	WATER - EP231X-ST PFAS - Full Suite (30 analytes) Super Trace
ES2510113-018	04-Apr-2025 09:45	0021_MW102_250404	✓	
ES2510113-019	03-Apr-2025 14:49	0021_MW103_250403	✓	
ES2510113-020	03-Apr-2025 13:32	0021_MW104_250403	✓	
ES2510113-021	03-Apr-2025 12:01	0021_MW105_250403	✓	
ES2510113-022	04-Apr-2025 11:08	0021_MW106_250404	✓	
ES2510113-023	03-Apr-2025 11:38	0021_MW107_250403	✓	
ES2510113-024	04-Apr-2025 17:13	0021_MW108_250404	✓	
ES2510113-025	03-Apr-2025 15:00	0021_MW109_250403	✓	
ES2510113-026	01-Apr-2025 15:00	0021_MW110_250401	✓	
ES2510113-027	08-Apr-2025 08:47	0021_MW111_250408	✓	
ES2510113-028	01-Apr-2025 15:00	0021_MW112_250401	✓	
ES2510113-029	07-Apr-2025 15:00	0021_MW113_250407	✓	
ES2510113-030	04-Apr-2025 15:00	0021_MW114_250404	✓	
ES2510113-031	02-Apr-2025 15:00	0021_MW117_250402	✓	
ES2510113-032	02-Apr-2025 15:00	0021_MW118_250402	✓	
ES2510113-033	02-Apr-2025 15:00	0021_MW119_250402	✓	
ES2510113-034	02-Apr-2025 15:00	0021_MW120_250402	✓	
ES2510113-035	02-Apr-2025 15:00	0021_MW121_250402	✓	
ES2510113-036	02-Apr-2025 15:18	0021_MW123_250402	✓	
ES2510113-037	03-Apr-2025 08:24	0021_MW124_250403	✓	
ES2510113-038	02-Apr-2025 12:03	0021_MW125_250402	✓	
ES2510113-039	01-Apr-2025 13:15	0021_MW126_250401	✓	
ES2510113-040	02-Apr-2025 16:29	0021_MW127_250402	✓	
ES2510113-041	02-Apr-2025 10:18	0021_MW128_250402	✓	
ES2510113-042	04-Apr-2025 12:55	0021_MW129_250404		✓
ES2510113-043	04-Apr-2025 00:00	0021_MW130_250404		✓
ES2510113-044	01-Apr-2025 15:45	0021_MW131_250401	✓	
ES2510113-045	01-Apr-2025 16:37	0021_MW132_250401	✓	
ES2510113-046	02-Apr-2025 11:50	0021_MW133_250402	✓	
ES2510113-047	08-Apr-2025 08:14	0021_MW134_250408	✓	
ES2510113-048	04-Apr-2025 17:12	0021_MW135_250404		✓
ES2510113-049	04-Apr-2025 15:18	0021_MW136_250404		✓
ES2510113-050	04-Apr-2025 14:01	0021_MW137_250404		✓
ES2510113-051	03-Apr-2025 03:16	0021_MW138_250403		✓
ES2510113-052	03-Apr-2025 12:15	0021_MW139_250403		✓
ES2510113-053	03-Apr-2025 01:35	0021_MW140_250403		✓
ES2510113-054	04-Apr-2025 08:54	0021_MW150_250404	✓	
ES2510113-055	04-Apr-2025 09:49	0021_MW151_250404	✓	
ES2510113-056	08-Apr-2025 08:10	0021_MW152_250408	✓	
ES2510113-057	04-Apr-2025 08:58	0021_MW153_250404	✓	
ES2510113-058	04-Apr-2025 09:13	0021_MW154_250404	✓	

			WATER - EP231X PFAS - Full Suite (31 analytes)	WATER - EP231X-ST PFAS - Full Suite (30 analytes) Super Trace
ES2510113-059	04-Apr-2025 10:06	0021_MW155_250404	✓	
ES2510113-060	02-Apr-2025 09:32	0021_MW160_250402	✓	
ES2510113-061	02-Apr-2025 10:56	0021_MW163_250402	✓	
ES2510113-062	02-Apr-2025 12:10	0021_MW164_250402	✓	
ES2510113-063	07-Apr-2025 12:24	0021_OTH001_250407	✓	
ES2510113-064	07-Apr-2025 12:08	0021_OTH002_250407	✓	
ES2510113-065	07-Apr-2025 12:51	0021_OTH003_250407	✓	
ES2510113-066	07-Apr-2025 13:06	0021_OTH005_250407	✓	
ES2510113-067	07-Apr-2025 12:16	0021_OTH006_250407	✓	
ES2510113-068	31-Mar-2025 16:00	0021_QC102_250331	✓	
ES2510113-069	01-Apr-2025 08:55	0021_QC103_250401	✓	
ES2510113-071	01-Apr-2025 00:00	0021_QC105_250401	✓	
ES2510113-072	02-Apr-2025 09:30	0021_QC106_250402	✓	
ES2510113-073	03-Apr-2025 10:00	0021_QC107_250403	✓	
ES2510113-074	03-Apr-2025 12:15	0021_QC108_250403		✓
ES2510113-075	04-Apr-2025 09:30	0021_QC109_250404	✓	
ES2510113-078	01-Apr-2025 15:45	0021_QC134_250401	✓	
ES2510113-080	02-Apr-2025 00:00	0021_QC136_250402	✓	
ES2510113-082	04-Apr-2025 08:58	0021_QC140_250404	✓	
ES2510113-084	01-Apr-2025 13:41	0021_QC154_250401	✓	
ES2510113-085	02-Apr-2025 10:18	0021_QC155_250402	✓	
ES2510113-086	03-Apr-2025 11:38	0021_QC156_250403	✓	
ES2510113-087	07-Apr-2025 12:24	0021_QC157_250407	✓	

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)	Email	andrew.duval@ghd.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	andrew.duval@ghd.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	andrew.duval@ghd.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	andrew.duval@ghd.com
- Chain of Custody (CoC) (COC)	Email	andrew.duval@ghd.com
- EDI Format - ESDAT (ESDAT)	Email	andrew.duval@ghd.com
- Electronic SRN for ESdat (ESRN_ESDAT)	Email	andrew.duval@ghd.com
GHD LAB REPORTS		
- *AU Certificate of Analysis - NATA (COA)	Email	ghdlabreports@ghd.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	ghdlabreports@ghd.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	ghdlabreports@ghd.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	ghdlabreports@ghd.com
- Chain of Custody (CoC) (COC)	Email	ghdlabreports@ghd.com
- EDI Format - ESDAT (ESDAT)	Email	ghdlabreports@ghd.com
- Electronic SRN for ESdat (ESRN_ESDAT)	Email	ghdlabreports@ghd.com
HELEN MILNE		
- *AU Certificate of Analysis - NATA (COA)	Email	helen.milne@ghd.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	helen.milne@ghd.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	helen.milne@ghd.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	helen.milne@ghd.com
- Chain of Custody (CoC) (COC)	Email	helen.milne@ghd.com
- EDI Format - ESDAT (ESDAT)	Email	helen.milne@ghd.com
- Electronic SRN for ESdat (ESRN_ESDAT)	Email	helen.milne@ghd.com
Jarrad Mawbey		
- *AU Certificate of Analysis - NATA (COA)	Email	Jarrad.Mawbey@ghd.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	Jarrad.Mawbey@ghd.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	Jarrad.Mawbey@ghd.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	Jarrad.Mawbey@ghd.com
- Chain of Custody (CoC) (COC)	Email	Jarrad.Mawbey@ghd.com
- EDI Format - ESDAT (ESDAT)	Email	Jarrad.Mawbey@ghd.com
- Electronic SRN for ESdat (ESRN_ESDAT)	Email	Jarrad.Mawbey@ghd.com

CERTIFICATE OF ANALYSIS

Work Order	: **ES2510113**	Page	: 1 of 49
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	: 12626622	Date Samples Received	: 08-Apr-2025 14:20
Order number	: 12626622	Date Analysis Commenced	: 14-Apr-2025
C-O-C number	: ----	Issue Date	: 29-Apr-2025 13:21
Sampler	: Jarrad Mawbey		
Site	: ----		
Quote number	: ES23GHDSER0026		
No. of samples received	: 87		
No. of samples analysed	: 87		

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

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

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

Signatories

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

Signatories	*Position*	*Accreditation Category*
Alex Rossi	Organic Chemist	Sydney Organics, Smithfield, NSW
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic 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-SD: LOR for some analytes on sample ES2510113_079 raised due to high moisture content.
- Amendment (24/04/2025): This report has been amended following the change in sampling date for samples 028, 076, 077 & 078
- Amendment (29/04/2025): This report has been amended following the change in sampling dates

Analytical Results

Sub-Matrix: SEDIMENT (Matrix: SOIL)				Sample ID	0021_QC104_250401	0021_QC110_250404	0021_QC111_250404	0021_QC135_250402	0021_QC139_250403
				Sampling date / time	01-Apr-2025 13:42	04-Apr-2025 10:45	04-Apr-2025 16:25	02-Apr-2025 00:00	03-Apr-2025 14:20
Compound	CAS Number	LOR	Unit		ES2510113-070	ES2510113-076	ES2510113-077	ES2510113-079	ES2510113-081
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	0.1	%		**18.3**	**25.0**	**38.5**	**92.2**	**26.7**
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0005	**0.0004**
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg		**0.0005**	<0.0002	<0.0002	**0.0082**	**0.0250**
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	**0.0007**	**0.0054**
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0005	**0.0004**
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0005	**0.0002**
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0012	<0.0005
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg		<0.001	<0.001	<0.001	<0.002	<0.001
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0005	<0.0002

Analytical Results

Sub-Matrix: SEDIMENT (Matrix: SOIL)				Sample ID	0021_QC104_250401	0021_QC110_250404	0021_QC111_250404	0021_QC135_250402	0021_QC139_250403
				Sampling date / time	01-Apr-2025 13:42	04-Apr-2025 10:45	04-Apr-2025 16:25	02-Apr-2025 00:00	03-Apr-2025 14:20
Compound	CAS Number	LOR	Unit		ES2510113-070	ES2510113-076	ES2510113-077	ES2510113-079	ES2510113-081
					Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0012	<0.0005
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0012	<0.0005
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0012	<0.0005
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0005	<0.0002
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0012	<0.0005
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
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
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
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
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 PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg		**0.0005**	<0.0002	<0.0002	**0.0089**	**0.0304**
Sum of PFAS (WA DER List)	----	0.0002	mg/kg		**0.0005**	<0.0002	<0.0002	**0.0089**	**0.0306**
Sum of PFAS	----	0.0002	mg/kg		**0.0005**	<0.0002	<0.0002	**0.0089**	**0.0314**
EP231S: PFAS Surrogate									
13C8-PFOA	----	0.0002	%		**99.6**	**103**	**100**	**99.3**	**101**
13C4-PFOS	----	0.0002	%		**87.6**	**93.0**	**98.6**	**94.5**	**93.9**

Analytical Results

Sub-Matrix: SEDIMENT (Matrix: SOIL)				Sample ID	0021_QC141_250404	----	----	----	----
				Sampling date / time	04-Apr-2025 13:28	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2510113-083	--------	--------	--------	--------
					Result	----	----	----	----
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	0.1	%		**26.4**	----	----	----	----
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg		<0.0002	----	----	----	----
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg		<0.0005	----	----	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg		<0.001	----	----	----	----
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg		<0.0002	----	----	----	----

Analytical Results

Sub-Matrix: SEDIMENT (Matrix: SOIL)				Sample ID	0021_QC141_250404	----	----	----	----
				Sampling date / time	04-Apr-2025 13:28	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2510113-083	--------	--------	--------	--------
					Result	----	----	----	----
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg		<0.0005	----	----	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg		<0.0002	----	----	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg		<0.0005	----	----	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg		<0.0005	----	----	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg		<0.0002	----	----	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg		<0.0005	----	----	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg		<0.0005	----	----	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg		<0.0005	----	----	----	----
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg		<0.0005	----	----	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg		<0.0005	----	----	----	----
EP231P: PFAS Sums									
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg		<0.0002	----	----	----	----
Sum of PFAS (WA DER List)	----	0.0002	mg/kg		<0.0002	----	----	----	----
Sum of PFAS	----	0.0002	mg/kg		<0.0002	----	----	----	----
EP231S: PFAS Surrogate									
13C8-PFOA	----	0.0002	%		**99.9**	----	----	----	----
13C4-PFOS	----	0.0002	%		**119**	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_MW018_250402	0021_MW020_250402	0021_MW021_250401	0021_MW022_250401	0021_MW024_250401
				Sampling date / time	02-Apr-2025 13:08	02-Apr-2025 08:34	01-Apr-2025 16:23	01-Apr-2025 13:01	01-Apr-2025 12:12
Compound	CAS Number	LOR	Unit		ES2510113-001	ES2510113-002	ES2510113-003	ES2510113-004	ES2510113-005
					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	**0.73**	<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	**0.72**	<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_250402	0021_MW020_250402	0021_MW021_250401	0021_MW022_250401	0021_MW024_250401
				Sampling date / time	02-Apr-2025 13:08	02-Apr-2025 08:34	01-Apr-2025 16:23	01-Apr-2025 13:01	01-Apr-2025 12:12
Compound	CAS Number	LOR	Unit		ES2510113-001	ES2510113-002	ES2510113-003	ES2510113-004	ES2510113-005
					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		**0.14**	<0.01	<0.01	**1.62**	<0.01
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		**0.14**	<0.01	<0.01	**1.45**	<0.01
Sum of PFAS (WA DER List)	----	0.01	µg/L		**0.14**	<0.01	<0.01	**1.53**	<0.01
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**97.2**	**102**	**95.6**	**94.9**	**93.7**
13C8-PFOA	----	0.02	%		**94.6**	**94.6**	**94.7**	**94.2**	**103**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_MW025_250402	0021_MW026_250407	0021_MW028_250402	0021_MW030_250403	0021_MW060_250401
				Sampling date / time	02-Apr-2025 11:03	07-Apr-2025 10:25	02-Apr-2025 14:12	03-Apr-2025 09:24	01-Apr-2025 15:44
Compound	CAS Number	LOR	Unit		ES2510113-006	ES2510113-007	ES2510113-008	ES2510113-009	ES2510113-010
					Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		<0.02	<0.02	**0.10**	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		<0.02	<0.02	**0.10**	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		<0.01	<0.01	**1.03**	**0.02**	<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	**0.50**	**0.04**	**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	**0.19**	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		<0.02	<0.02	**0.63**	<0.02	<0.02
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		<0.02	<0.02	**0.04**	<0.02	<0.02
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		<0.01	<0.01	**0.04**	<0.01	<0.01
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_MW025_250402	0021_MW026_250407	0021_MW028_250402	0021_MW030_250403	0021_MW060_250401
				Sampling date / time	02-Apr-2025 11:03	07-Apr-2025 10:25	02-Apr-2025 14:12	03-Apr-2025 09:24	01-Apr-2025 15:44
Compound	CAS Number	LOR	Unit		ES2510113-006	ES2510113-007	ES2510113-008	ES2510113-009	ES2510113-010
					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		<0.01	<0.01	**2.79**	**0.06**	**0.03**
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		<0.01	<0.01	**1.53**	**0.06**	**0.03**
Sum of PFAS (WA DER List)	----	0.01	µg/L		<0.01	<0.01	**2.63**	**0.06**	**0.03**
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**99.4**	**95.6**	**96.2**	**106**	**95.0**
13C8-PFOA	----	0.02	%		**102**	**102**	**105**	**99.1**	**101**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_MW063_250403	0021_MW064_250403	0021_MW065_250403	0021_MW070_250407	0021_MW071_250407
				Sampling date / time	03-Apr-2025 14:51	03-Apr-2025 13:44	03-Apr-2025 12:32	07-Apr-2025 10:18	07-Apr-2025 11:34
Compound	CAS Number	LOR	Unit		ES2510113-011	ES2510113-012	ES2510113-013	ES2510113-014	ES2510113-015
					Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		**0.06**	**0.13**	**0.08**	**0.11**	**0.23**
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		**0.09**	**0.14**	**0.06**	**0.27**	**0.31**
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		**1.08**	**0.47**	**0.45**	**5.92**	**2.12**
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		**0.07**	<0.02	<0.02	**0.71**	**0.07**
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		**1.57**	**0.18**	**0.36**	**40.4**	**0.50**
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**	**0.03**	**0.06**	**0.07**	**0.08**
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		**0.08**	**0.14**	**0.26**	**0.40**	**0.37**
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		<0.02	<0.02	<0.02	**0.08**	**0.06**
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		**0.05**	<0.01	**0.03**	**0.30**	**0.09**
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_250403	0021_MW064_250403	0021_MW065_250403	0021_MW070_250407	0021_MW071_250407
				Sampling date / time	03-Apr-2025 14:51	03-Apr-2025 13:44	03-Apr-2025 12:32	07-Apr-2025 10:18	07-Apr-2025 11:34
Compound	CAS Number	LOR	Unit		ES2510113-011	ES2510113-012	ES2510113-013	ES2510113-014	ES2510113-015
					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		**3.02**	**1.13**	**1.32**	**48.4**	**3.93**
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		**2.65**	**0.65**	**0.81**	**46.3**	**2.62**
Sum of PFAS (WA DER List)	----	0.01	µg/L		**2.86**	**0.95**	**1.24**	**47.3**	**3.45**
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**94.8**	**99.3**	**106**	**91.5**	**93.6**
13C8-PFOA	----	0.02	%		**102**	**103**	**97.1**	**105**	**99.7**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_MW072_250407	0021_MW101_250404	0021_MW102_250404	0021_MW103_250403	0021_MW104_250403
				Sampling date / time	07-Apr-2025 10:43	04-Apr-2025 08:59	04-Apr-2025 09:45	03-Apr-2025 14:49	03-Apr-2025 13:32
Compound	CAS Number	LOR	Unit		ES2510113-016	ES2510113-017	ES2510113-018	ES2510113-019	ES2510113-020
					Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		**0.23**	<0.02	**0.35**	**0.28**	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		**0.43**	<0.02	**0.36**	**0.32**	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		**7.35**	**0.07**	**2.99**	**3.07**	**0.05**
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		**0.80**	<0.02	**0.26**	**0.16**	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		**18.1**	**0.28**	**5.64**	**16.9**	**0.12**
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		**0.09**	<0.02	**0.16**	**0.12**	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		**0.56**	<0.02	**0.98**	**0.66**	<0.02
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		**0.11**	<0.02	**0.14**	**0.07**	<0.02
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		**0.52**	<0.01	**0.17**	**0.10**	<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_MW072_250407	0021_MW101_250404	0021_MW102_250404	0021_MW103_250403	0021_MW104_250403
				Sampling date / time	07-Apr-2025 10:43	04-Apr-2025 08:59	04-Apr-2025 09:45	03-Apr-2025 14:49	03-Apr-2025 13:32
Compound	CAS Number	LOR	Unit		ES2510113-016	ES2510113-017	ES2510113-018	ES2510113-019	ES2510113-020
					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		**28.3**	**0.35**	**11.3**	**21.8**	**0.17**
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		**25.4**	**0.35**	**8.63**	**20.0**	**0.17**
Sum of PFAS (WA DER List)	----	0.01	µg/L		**27.0**	**0.35**	**10.5**	**21.2**	**0.17**
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**96.4**	**100**	**99.8**	**101**	**104**
13C8-PFOA	----	0.02	%		**105**	**106**	**104**	**105**	**105**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_MW105_250403	0021_MW106_250404	0021_MW107_250403	0021_MW108_250404	0021_MW109_250403
				Sampling date / time	03-Apr-2025 12:01	04-Apr-2025 11:08	03-Apr-2025 11:38	04-Apr-2025 17:13	03-Apr-2025 15:00
Compound	CAS Number	LOR	Unit		ES2510113-021	ES2510113-022	ES2510113-023	ES2510113-024	ES2510113-025
					Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		**0.07**	**0.45**	**0.10**	**0.08**	**0.05**
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		**0.16**	**1.02**	**0.12**	**0.13**	**0.07**
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		**3.43**	**17.6**	**1.59**	**2.29**	**0.94**
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		**0.17**	**1.96**	**0.07**	**0.11**	**0.04**
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		**16.0**	**62.8**	**1.53**	**3.18**	**1.78**
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L		<0.02	**0.08**	<0.02	<0.02	<0.02
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L		<0.1	**0.2**	<0.1	<0.1	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		**0.03**	**0.47**	**0.11**	**0.06**	**0.05**
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		**0.27**	**2.76**	**0.37**	**0.25**	**0.26**
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		**0.04**	**0.28**	**0.05**	**0.04**	**0.02**
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		**0.09**	**0.83**	**0.09**	**0.07**	**0.04**
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_MW105_250403	0021_MW106_250404	0021_MW107_250403	0021_MW108_250404	0021_MW109_250403
				Sampling date / time	03-Apr-2025 12:01	04-Apr-2025 11:08	03-Apr-2025 11:38	04-Apr-2025 17:13	03-Apr-2025 15:00
Compound	CAS Number	LOR	Unit		ES2510113-021	ES2510113-022	ES2510113-023	ES2510113-024	ES2510113-025
					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		**20.5**	**88.9**	**4.07**	**6.23**	**3.25**
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		**19.4**	**80.4**	**3.12**	**5.47**	**2.72**
Sum of PFAS (WA DER List)	----	0.01	µg/L		**19.9**	**85.4**	**3.84**	**5.97**	**3.14**
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**95.0**	**91.7**	**97.4**	**92.1**	**104**
13C8-PFOA	----	0.02	%		**106**	**101**	**100**	**101**	**107**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_MW110_250401	0021_MW111_250408	0021_MW112_250401	0021_MW113_250407	0021_MW114_250404
				Sampling date / time	01-Apr-2025 15:00	08-Apr-2025 08:47	01-Apr-2025 15:00	07-Apr-2025 15:00	04-Apr-2025 15:00
Compound	CAS Number	LOR	Unit		ES2510113-026	ES2510113-027	ES2510113-028	ES2510113-029	ES2510113-030
					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	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		**0.08**	**0.02**	<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	**0.02**	<0.01	**0.04**	<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_MW110_250401	0021_MW111_250408	0021_MW112_250401	0021_MW113_250407	0021_MW114_250404
				Sampling date / time	01-Apr-2025 15:00	08-Apr-2025 08:47	01-Apr-2025 15:00	07-Apr-2025 15:00	04-Apr-2025 15:00
Compound	CAS Number	LOR	Unit		ES2510113-026	ES2510113-027	ES2510113-028	ES2510113-029	ES2510113-030
					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		**0.08**	**0.04**	<0.01	**0.04**	<0.01
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		**0.08**	**0.04**	<0.01	**0.04**	<0.01
Sum of PFAS (WA DER List)	----	0.01	µg/L		**0.08**	**0.04**	<0.01	**0.04**	<0.01
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**65.2**	**93.8**	**96.1**	**95.6**	**94.6**
13C8-PFOA	----	0.02	%		**63.7**	**101**	**98.0**	**100**	**98.7**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_MW117_250402	0021_MW118_250402	0021_MW119_250402	0021_MW120_250402	0021_MW121_250402
				Sampling date / time	02-Apr-2025 15:00	02-Apr-2025 15:00	02-Apr-2025 15:00	02-Apr-2025 15:00	02-Apr-2025 15:00
Compound	CAS Number	LOR	Unit		ES2510113-031	ES2510113-032	ES2510113-033	ES2510113-034	ES2510113-035
					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	**0.11**	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		**0.02**	**0.03**	<0.02	**0.18**	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		**0.17**	**0.53**	<0.01	**2.00**	**0.10**
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		<0.02	<0.02	<0.02	**0.07**	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		**0.04**	**0.64**	<0.01	**1.08**	**0.02**
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	**0.04**	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		<0.02	<0.02	<0.02	**0.20**	<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	**0.05**	<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_MW117_250402	0021_MW118_250402	0021_MW119_250402	0021_MW120_250402	0021_MW121_250402
				Sampling date / time	02-Apr-2025 15:00	02-Apr-2025 15:00	02-Apr-2025 15:00	02-Apr-2025 15:00	02-Apr-2025 15:00
Compound	CAS Number	LOR	Unit		ES2510113-031	ES2510113-032	ES2510113-033	ES2510113-034	ES2510113-035
					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		**0.23**	**1.22**	<0.01	**3.79**	**0.12**
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		**0.21**	**1.17**	<0.01	**3.08**	**0.12**
Sum of PFAS (WA DER List)	----	0.01	µg/L		**0.21**	**1.19**	<0.01	**3.50**	**0.12**
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**101**	**107**	**92.6**	**95.3**	**99.2**
13C8-PFOA	----	0.02	%		**104**	**99.4**	**102**	**101**	**100**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_MW123_250402	0021_MW124_250403	0021_MW125_250402	0021_MW126_250401	0021_MW127_250402
				Sampling date / time	02-Apr-2025 15:18	03-Apr-2025 08:24	02-Apr-2025 12:03	01-Apr-2025 13:15	02-Apr-2025 16:29
Compound	CAS Number	LOR	Unit		ES2510113-036	ES2510113-037	ES2510113-038	ES2510113-039	ES2510113-040
					Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		**0.06**	<0.02	<0.02	<0.02	**0.07**
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		**0.13**	<0.02	<0.02	<0.02	**0.08**
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		**1.03**	**0.22**	**0.09**	<0.01	**0.73**
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		**0.11**	<0.02	<0.02	<0.02	**0.03**
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		**0.70**	**0.44**	**0.05**	<0.01	**0.64**
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		**0.04**	<0.02	<0.02	<0.02	**0.02**
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		**0.13**	<0.02	<0.02	<0.02	**0.12**
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		**0.03**	<0.02	<0.02	<0.02	<0.02
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		**0.07**	<0.01	<0.01	<0.01	**0.03**
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_MW123_250402	0021_MW124_250403	0021_MW125_250402	0021_MW126_250401	0021_MW127_250402
				Sampling date / time	02-Apr-2025 15:18	03-Apr-2025 08:24	02-Apr-2025 12:03	01-Apr-2025 13:15	02-Apr-2025 16:29
Compound	CAS Number	LOR	Unit		ES2510113-036	ES2510113-037	ES2510113-038	ES2510113-039	ES2510113-040
					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		**2.30**	**0.66**	**0.14**	<0.01	**1.75**
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		**1.73**	**0.66**	**0.14**	<0.01	**1.37**
Sum of PFAS (WA DER List)	----	0.01	µg/L		**2.06**	**0.66**	**0.14**	<0.01	**1.61**
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**101**	**102**	**97.2**	**93.8**	**95.8**
13C8-PFOA	----	0.02	%		**106**	**100**	**99.2**	**99.2**	**102**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_MW128_250402	0021_MW129_250404	0021_MW130_250404	0021_MW131_250401	0021_MW132_250401
				Sampling date / time	02-Apr-2025 10:18	04-Apr-2025 12:55	04-Apr-2025 00:00	01-Apr-2025 15:45	01-Apr-2025 16:37
Compound	CAS Number	LOR	Unit		ES2510113-041	ES2510113-042	ES2510113-043	ES2510113-044	ES2510113-045
					Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0005	µg/L		----	<0.0005	<0.0005	----	----
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		<0.02	----	----	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0005	µg/L		----	<0.0005	<0.0005	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0005	µg/L		----	<0.0005	<0.0005	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		<0.02	----	----	<0.02	<0.02
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0005	µg/L		----	<0.0005	<0.0005	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		**0.04**	----	----	**0.04**	<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	0.0003	µg/L		----	**0.0008**	<0.0003	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		<0.01	----	----	**0.05**	<0.01
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0005	µg/L		----	<0.0005	<0.0005	----	----
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	0.002	µg/L		----	<0.002	<0.002	----	----
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L		<0.1	----	----	<0.1	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0005	µg/L		----	<0.0005	<0.0005	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		<0.02	----	----	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0005	µg/L		----	<0.0005	<0.0005	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		<0.02	----	----	<0.02	<0.02
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0005	µg/L		----	<0.0005	<0.0005	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		<0.02	----	----	<0.02	<0.02

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_MW128_250402	0021_MW129_250404	0021_MW130_250404	0021_MW131_250401	0021_MW132_250401
				Sampling date / time	02-Apr-2025 10:18	04-Apr-2025 12:55	04-Apr-2025 00:00	01-Apr-2025 15:45	01-Apr-2025 16:37
Compound	CAS Number	LOR	Unit		ES2510113-041	ES2510113-042	ES2510113-043	ES2510113-044	ES2510113-045
					Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids - Continued									
Perfluorooctanoic acid (PFOA)	335-67-1	0.0005	µg/L		----	<0.0005	<0.0005	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		<0.01	----	----	<0.01	<0.01
Perfluorononanoic acid (PFNA)	375-95-1	0.0005	µg/L		----	<0.0005	<0.0005	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L		<0.02	----	----	<0.02	<0.02
Perfluorodecanoic acid (PFDA)	335-76-2	0.0005	µg/L		----	<0.0005	<0.0005	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L		<0.02	----	----	<0.02	<0.02
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0005	µg/L		----	<0.0005	<0.0005	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L		<0.02	----	----	<0.02	<0.02
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0005	µg/L		----	<0.0005	<0.0005	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L		<0.02	----	----	<0.02	<0.02
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0005	µg/L		----	<0.0005	<0.0005	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L		<0.02	----	----	<0.02	<0.02
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	µg/L		----	<0.0005	<0.0005	----	----
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	0.0005	µg/L		----	<0.0005	<0.0005	----	----
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L		<0.02	----	----	<0.02	<0.02
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.001	µg/L		----	<0.001	<0.001	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L		<0.05	----	----	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.001	µg/L		----	<0.001	<0.001	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_MW128_250402	0021_MW129_250404	0021_MW130_250404	0021_MW131_250401	0021_MW132_250401
				Sampling date / time	02-Apr-2025 10:18	04-Apr-2025 12:55	04-Apr-2025 00:00	01-Apr-2025 15:45	01-Apr-2025 16:37
Compound	CAS Number	LOR	Unit		ES2510113-041	ES2510113-042	ES2510113-043	ES2510113-044	ES2510113-045
					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
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.001	µg/L		----	<0.001	<0.001	----	----
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	0.001	µg/L		----	<0.001	<0.001	----	----
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	0.0005	µg/L		----	<0.0005	<0.0005	----	----
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	0.0005	µg/L		----	<0.0005	<0.0005	----	----
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	0.001	µg/L		----	<0.001	<0.001	----	----
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	0.001	µg/L		----	<0.001	<0.001	----	----
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	0.001	µg/L		----	<0.001	<0.001	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L		<0.05	----	----	<0.05	<0.05

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_MW128_250402	0021_MW129_250404	0021_MW130_250404	0021_MW131_250401	0021_MW132_250401
				Sampling date / time	02-Apr-2025 10:18	04-Apr-2025 12:55	04-Apr-2025 00:00	01-Apr-2025 15:45	01-Apr-2025 16:37
Compound	CAS Number	LOR	Unit		ES2510113-041	ES2510113-042	ES2510113-043	ES2510113-044	ES2510113-045
					Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued									
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.001	µg/L		----	<0.001	<0.001	----	----
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	----	0.0003	µg/L		----	**0.0008**	<0.0003	----	----
Sum of PFAS	----	0.01	µg/L		**0.04**	----	----	**0.09**	<0.01
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0003	µg/L		----	**0.0008**	<0.0003	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		**0.04**	----	----	**0.09**	<0.01
Sum of PFAS (WA DER List)	----	0.0003	µg/L		----	**0.0008**	<0.0003	----	----
Sum of PFAS (WA DER List)	----	0.01	µg/L		**0.04**	----	----	**0.09**	<0.01
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0005	%		----	**98.4**	**99.5**	----	----
13C4-PFOS	----	0.02	%		**103**	----	----	**98.8**	**98.5**
13C8-PFOA	----	0.0005	%		----	**111**	**111**	----	----
13C8-PFOA	----	0.02	%		**100.0**	----	----	**98.4**	**103**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_MW133_250402	0021_MW134_250408	0021_MW135_250404	0021_MW136_250404	0021_MW137_250404
				Sampling date / time	02-Apr-2025 11:50	08-Apr-2025 08:14	04-Apr-2025 17:12	04-Apr-2025 15:18	04-Apr-2025 14:01
Compound	CAS Number	LOR	Unit		ES2510113-046	ES2510113-047	ES2510113-048	ES2510113-049	ES2510113-050
					Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0005	µg/L		----	----	<0.0005	<0.0005	**0.0012**
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		<0.02	<0.02	----	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0005	µg/L		----	----	<0.0005	<0.0005	**0.0007**
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0005	µg/L		----	----	<0.0005	<0.0005	**0.0061**
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		<0.02	<0.02	----	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0005	µg/L		----	----	<0.0005	<0.0005	<0.0005
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		<0.01	<0.01	----	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		<0.02	<0.02	----	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0003	µg/L		----	----	**0.0020**	**0.0006**	**0.0129**
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		<0.01	<0.01	----	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0005	µg/L		----	----	<0.0005	<0.0005	<0.0005
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L		<0.02	<0.02	----	----	----
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.002	µg/L		----	----	<0.002	<0.002	<0.002
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L		<0.1	<0.1	----	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0005	µg/L		----	----	<0.0005	<0.0005	<0.0005
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		<0.02	<0.02	----	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0005	µg/L		----	----	<0.0005	<0.0005	<0.0005
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		<0.02	<0.02	----	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0005	µg/L		----	----	<0.0005	<0.0005	<0.0005
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		<0.02	<0.02	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_MW133_250402	0021_MW134_250408	0021_MW135_250404	0021_MW136_250404	0021_MW137_250404
				Sampling date / time	02-Apr-2025 11:50	08-Apr-2025 08:14	04-Apr-2025 17:12	04-Apr-2025 15:18	04-Apr-2025 14:01
Compound	CAS Number	LOR	Unit		ES2510113-046	ES2510113-047	ES2510113-048	ES2510113-049	ES2510113-050
					Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids - Continued									
Perfluorooctanoic acid (PFOA)	335-67-1	0.0005	µg/L		----	----	<0.0005	<0.0005	<0.0005
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		<0.01	<0.01	----	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.0005	µg/L		----	----	<0.0005	<0.0005	<0.0005
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L		<0.02	<0.02	----	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.0005	µg/L		----	----	<0.0005	<0.0005	<0.0005
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L		<0.02	<0.02	----	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0005	µg/L		----	----	<0.0005	<0.0005	<0.0005
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L		<0.02	<0.02	----	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0005	µg/L		----	----	<0.0005	<0.0005	<0.0005
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L		<0.02	<0.02	----	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0005	µg/L		----	----	<0.0005	<0.0005	<0.0005
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L		<0.02	<0.02	----	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	µg/L		----	----	<0.0005	<0.0005	<0.0005
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L		<0.05	<0.05	----	----	----
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0005	µg/L		----	----	<0.0005	<0.0005	<0.0005
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L		<0.02	<0.02	----	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.001	µg/L		----	----	<0.001	<0.001	<0.001
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L		<0.05	<0.05	----	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.001	µg/L		----	----	<0.001	<0.001	<0.001

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_MW133_250402	0021_MW134_250408	0021_MW135_250404	0021_MW136_250404	0021_MW137_250404
				Sampling date / time	02-Apr-2025 11:50	08-Apr-2025 08:14	04-Apr-2025 17:12	04-Apr-2025 15:18	04-Apr-2025 14:01
Compound	CAS Number	LOR	Unit		ES2510113-046	ES2510113-047	ES2510113-048	ES2510113-049	ES2510113-050
					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	----	----	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.001	µg/L		----	----	<0.001	<0.001	<0.001
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L		<0.05	<0.05	----	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.001	µg/L		----	----	<0.001	<0.001	<0.001
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L		<0.05	<0.05	----	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0005	µg/L		----	----	<0.0005	<0.0005	<0.0005
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L		<0.02	<0.02	----	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0005	µg/L		----	----	<0.0005	<0.0005	<0.0005
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L		<0.02	<0.02	----	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.001	µg/L		----	----	<0.001	<0.001	<0.001
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L		<0.05	<0.05	----	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.001	µg/L		----	----	**0.016**	<0.001	<0.001
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L		<0.05	<0.05	----	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.001	µg/L		----	----	<0.001	<0.001	<0.001
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L		<0.05	<0.05	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_MW133_250402	0021_MW134_250408	0021_MW135_250404	0021_MW136_250404	0021_MW137_250404
				Sampling date / time	02-Apr-2025 11:50	08-Apr-2025 08:14	04-Apr-2025 17:12	04-Apr-2025 15:18	04-Apr-2025 14:01
Compound	CAS Number	LOR	Unit		ES2510113-046	ES2510113-047	ES2510113-048	ES2510113-049	ES2510113-050
					Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued									
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.001	µg/L		----	----	<0.001	<0.001	<0.001
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L		<0.05	<0.05	----	----	----
EP231P: PFAS Sums									
Sum of PFAS	----	0.0003	µg/L		----	----	**0.0180**	**0.0006**	**0.0209**
Sum of PFAS	----	0.01	µg/L		<0.01	<0.01	----	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0003	µg/L		----	----	**0.0020**	**0.0006**	**0.0190**
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		<0.01	<0.01	----	----	----
Sum of PFAS (WA DER List)	----	0.0003	µg/L		----	----	**0.0180**	**0.0006**	**0.0202**
Sum of PFAS (WA DER List)	----	0.01	µg/L		<0.01	<0.01	----	----	----
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0005	%		----	----	**94.6**	**97.9**	**98.9**
13C4-PFOS	----	0.02	%		**89.8**	**105**	----	----	----
13C8-PFOA	----	0.0005	%		----	----	**107**	**106**	**114**
13C8-PFOA	----	0.02	%		**101**	**100**	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_MW138_250403	0021_MW139_250403	0021_MW140_250403	0021_MW150_250404	0021_MW151_250404
				Sampling date / time	03-Apr-2025 03:16	03-Apr-2025 12:15	03-Apr-2025 01:35	04-Apr-2025 08:54	04-Apr-2025 09:49
Compound	CAS Number	LOR	Unit		ES2510113-051	ES2510113-052	ES2510113-053	ES2510113-054	ES2510113-055
					Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		----	----	----	**0.10**	**0.45**
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		----	----	----	**0.22**	**0.84**
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		----	----	----	**3.60**	**8.58**
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		----	----	----	**0.70**	**0.55**
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0003	µg/L		<0.0003	**0.0004**	<0.0003	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		----	----	----	**19.9**	**9.40**
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L		----	----	----	<0.02	<0.02
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.002	µg/L		<0.002	<0.002	<0.002	----	----
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L		----	----	----	<0.1	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		----	----	----	**0.07**	**0.15**
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		----	----	----	**0.36**	**0.70**
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		----	----	----	**0.05**	**0.12**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_MW138_250403	0021_MW139_250403	0021_MW140_250403	0021_MW150_250404	0021_MW151_250404
				Sampling date / time	03-Apr-2025 03:16	03-Apr-2025 12:15	03-Apr-2025 01:35	04-Apr-2025 08:54	04-Apr-2025 09:49
Compound	CAS Number	LOR	Unit		ES2510113-051	ES2510113-052	ES2510113-053	ES2510113-054	ES2510113-055
					Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids - Continued									
Perfluorooctanoic acid (PFOA)	335-67-1	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		----	----	----	**0.36**	**0.40**
Perfluorononanoic acid (PFNA)	375-95-1	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L		----	----	----	<0.02	<0.02
Perfluorodecanoic acid (PFDA)	335-76-2	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L		----	----	----	<0.02	<0.02
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L		----	----	----	<0.02	<0.02
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L		----	----	----	<0.02	<0.02
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L		----	----	----	<0.02	<0.02
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L		----	----	----	<0.05	<0.05
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L		----	----	----	<0.02	<0.02
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.001	µg/L		<0.001	<0.001	<0.001	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L		----	----	----	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.001	µg/L		<0.001	<0.001	<0.001	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_MW138_250403	0021_MW139_250403	0021_MW140_250403	0021_MW150_250404	0021_MW151_250404
				Sampling date / time	03-Apr-2025 03:16	03-Apr-2025 12:15	03-Apr-2025 01:35	04-Apr-2025 08:54	04-Apr-2025 09:49
Compound	CAS Number	LOR	Unit		ES2510113-051	ES2510113-052	ES2510113-053	ES2510113-054	ES2510113-055
					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
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.001	µg/L		<0.001	<0.001	<0.001	----	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L		----	----	----	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.001	µg/L		<0.001	<0.001	<0.001	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L		----	----	----	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L		----	----	----	<0.02	<0.02
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0005	µg/L		<0.0005	<0.0005	<0.0005	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L		----	----	----	<0.02	<0.02
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.001	µg/L		<0.001	<0.001	<0.001	----	----
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L		----	----	----	<0.05	<0.05
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.001	µg/L		**0.009**	<0.001	<0.001	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L		----	----	----	<0.05	<0.05
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.001	µg/L		<0.001	<0.001	<0.001	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L		----	----	----	<0.05	<0.05

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_MW138_250403	0021_MW139_250403	0021_MW140_250403	0021_MW150_250404	0021_MW151_250404
				Sampling date / time	03-Apr-2025 03:16	03-Apr-2025 12:15	03-Apr-2025 01:35	04-Apr-2025 08:54	04-Apr-2025 09:49
Compound	CAS Number	LOR	Unit		ES2510113-051	ES2510113-052	ES2510113-053	ES2510113-054	ES2510113-055
					Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued									
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.001	µg/L		<0.001	<0.001	<0.001	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L		----	----	----	<0.05	<0.05
EP231P: PFAS Sums									
Sum of PFAS	----	0.0003	µg/L		**0.0090**	**0.0004**	<0.0003	----	----
Sum of PFAS	----	0.01	µg/L		----	----	----	**25.4**	**21.4**
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0003	µg/L		<0.0003	**0.0004**	<0.0003	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		----	----	----	**23.5**	**18.0**
Sum of PFAS (WA DER List)	----	0.0003	µg/L		**0.0090**	**0.0004**	<0.0003	----	----
Sum of PFAS (WA DER List)	----	0.01	µg/L		----	----	----	**24.4**	**19.8**
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0005	%		**101**	**102**	**99.3**	----	----
13C4-PFOS	----	0.02	%		----	----	----	**95.8**	**93.4**
13C8-PFOA	----	0.0005	%		**110**	**105**	**103**	----	----
13C8-PFOA	----	0.02	%		----	----	----	**103**	**109**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_MW152_250408	0021_MW153_250404	0021_MW154_250404	0021_MW155_250404	0021_MW160_250402
				Sampling date / time	08-Apr-2025 08:10	04-Apr-2025 08:58	04-Apr-2025 09:13	04-Apr-2025 10:06	02-Apr-2025 09:32
Compound	CAS Number	LOR	Unit		ES2510113-056	ES2510113-057	ES2510113-058	ES2510113-059	ES2510113-060
					Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		**0.37**	**0.39**	**6.14**	**3.45**	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		**0.75**	**0.70**	**5.88**	**3.78**	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		**10.4**	**8.84**	**35.9**	**29.4**	<0.01
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		**1.35**	**0.91**	**2.07**	**0.90**	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		**27.4**	**16.1**	**20.2**	**31.5**	<0.01
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L		<0.02	<0.02	<0.02	**0.32**	<0.02
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L		<0.1	<0.1	**0.8**	**0.7**	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		**0.16**	**0.17**	**1.30**	**1.78**	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		**0.79**	**0.86**	**6.40**	**8.63**	<0.02
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		**0.13**	**0.15**	**0.98**	**1.05**	<0.02
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		**0.70**	**0.58**	**2.04**	**2.64**	<0.01
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L		<0.02	<0.02	<0.02	**0.50**	<0.02
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L		<0.02	<0.02	<0.02	**0.60**	<0.02
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L		<0.02	<0.02	<0.02	**0.05**	<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_MW152_250408	0021_MW153_250404	0021_MW154_250404	0021_MW155_250404	0021_MW160_250402
				Sampling date / time	08-Apr-2025 08:10	04-Apr-2025 08:58	04-Apr-2025 09:13	04-Apr-2025 10:06	02-Apr-2025 09:32
Compound	CAS Number	LOR	Unit		ES2510113-056	ES2510113-057	ES2510113-058	ES2510113-059	ES2510113-060
					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		**42.2**	**28.9**	**85.0**	**87.5**	<0.01
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		**37.8**	**24.9**	**56.1**	**60.9**	<0.01
Sum of PFAS (WA DER List)	----	0.01	µg/L		**40.0**	**27.1**	**73.8**	**79.2**	<0.01
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**100**	**99.8**	**95.3**	**73.1**	**98.6**
13C8-PFOA	----	0.02	%		**104**	**101**	**106**	**97.6**	**105**

Analytical Results

Sub-Matrix: WATER
(Matrix: WATER)

Compound	CAS Number	LOR	Unit	Sample ID	0021_MW163_250402	0021_MW164_250402	0021_OTH001_250407	0021_OTH002_250407	0021_OTH003_250407
				Sampling date / time	02-Apr-2025 10:56	02-Apr-2025 12:10	07-Apr-2025 12:24	07-Apr-2025 12:08	07-Apr-2025 12:51
					ES2510113-061	ES2510113-062	ES2510113-063	ES2510113-064	ES2510113-065
					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**	**0.11**
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		<0.02	<0.02	<0.02	**0.03**	**0.13**
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		**0.12**	**0.26**	**0.02**	**0.25**	**1.35**
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	**0.11**
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		**0.51**	**2.86**	**0.06**	**0.61**	**3.15**
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	**0.04**	**0.19**
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		<0.02	<0.02	<0.02	**0.22**	**0.41**
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		<0.02	<0.02	<0.02	**0.02**	**0.07**
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		<0.01	<0.01	<0.01	**0.06**	**0.10**
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_MW163_250402	0021_MW164_250402	0021_OTH001_250407	0021_OTH002_250407	0021_OTH003_250407
				Sampling date / time	02-Apr-2025 10:56	02-Apr-2025 12:10	07-Apr-2025 12:24	07-Apr-2025 12:08	07-Apr-2025 12:51
Compound	CAS Number	LOR	Unit		ES2510113-061	ES2510113-062	ES2510113-063	ES2510113-064	ES2510113-065
					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	**0.69**
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		**0.63**	**3.41**	**0.08**	**1.27**	**6.35**
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		**0.63**	**3.12**	**0.08**	**0.86**	**4.50**
Sum of PFAS (WA DER List)	----	0.01	µg/L		**0.63**	**3.12**	**0.08**	**1.22**	**6.07**
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**102**	**99.4**	**96.1**	**102**	**101**
13C8-PFOA	----	0.02	%		**105**	**104**	**103**	**101**	**104**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_OTH005_250407	0021_OTH006_250407	0021_QC102_250331	0021_QC103_250401	0021_QC105_250401
				Sampling date / time	07-Apr-2025 13:06	07-Apr-2025 12:16	31-Mar-2025 16:00	01-Apr-2025 08:55	01-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2510113-066	ES2510113-067	ES2510113-068	ES2510113-069	ES2510113-071
					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	**0.04**	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		**0.02**	<0.01	**0.68**	<0.01	<0.01
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		<0.02	<0.02	**0.03**	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		**0.11**	<0.01	**1.36**	**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**	**0.08**	<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	**0.02**	<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_OTH005_250407	0021_OTH006_250407	0021_QC102_250331	0021_QC103_250401	0021_QC105_250401
				Sampling date / time	07-Apr-2025 13:06	07-Apr-2025 12:16	31-Mar-2025 16:00	01-Apr-2025 08:55	01-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2510113-066	ES2510113-067	ES2510113-068	ES2510113-069	ES2510113-071
					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**	**0.02**	**2.24**	**0.01**	<0.01
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		**0.13**	<0.01	**2.04**	**0.01**	<0.01
Sum of PFAS (WA DER List)	----	0.01	µg/L		**0.13**	**0.02**	**2.17**	**0.01**	<0.01
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**95.6**	**93.2**	**104**	**101**	**102**
13C8-PFOA	----	0.02	%		**102**	**105**	**109**	**102**	**115**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_QC106_250402	0021_QC107_250403	0021_QC108_250403	0021_QC109_250404	0021_QC134_250401
				Sampling date / time	02-Apr-2025 09:30	03-Apr-2025 10:00	03-Apr-2025 12:15	04-Apr-2025 09:30	01-Apr-2025 15:45
Compound	CAS Number	LOR	Unit		ES2510113-072	ES2510113-073	ES2510113-074	ES2510113-075	ES2510113-078
					Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0005	µg/L		----	----	<0.0005	----	----
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		<0.02	<0.02	----	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0005	µg/L		----	----	<0.0005	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0005	µg/L		----	----	<0.0005	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		**0.02**	<0.02	----	<0.02	<0.02
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0005	µg/L		----	----	<0.0005	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		**0.27**	<0.01	----	<0.01	**0.16**
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		<0.02	<0.02	----	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0003	µg/L		----	----	**0.0004**	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		**0.20**	<0.01	----	<0.01	**0.16**
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0005	µg/L		----	----	<0.0005	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L		<0.02	<0.02	----	<0.02	<0.02
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.002	µg/L		----	----	<0.002	----	----
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L		<0.1	<0.1	----	<0.1	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0005	µg/L		----	----	<0.0005	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		<0.02	<0.02	----	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0005	µg/L		----	----	<0.0005	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		**0.04**	<0.02	----	<0.02	<0.02
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0005	µg/L		----	----	<0.0005	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		<0.02	<0.02	----	<0.02	<0.02

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_QC106_250402	0021_QC107_250403	0021_QC108_250403	0021_QC109_250404	0021_QC134_250401
				Sampling date / time	02-Apr-2025 09:30	03-Apr-2025 10:00	03-Apr-2025 12:15	04-Apr-2025 09:30	01-Apr-2025 15:45
Compound	CAS Number	LOR	Unit		ES2510113-072	ES2510113-073	ES2510113-074	ES2510113-075	ES2510113-078
					Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids - Continued									
Perfluorooctanoic acid (PFOA)	335-67-1	0.0005	µg/L		----	----	<0.0005	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		**0.02**	<0.01	----	<0.01	**0.02**
Perfluorononanoic acid (PFNA)	375-95-1	0.0005	µg/L		----	----	<0.0005	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L		<0.02	<0.02	----	<0.02	<0.02
Perfluorodecanoic acid (PFDA)	335-76-2	0.0005	µg/L		----	----	<0.0005	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L		<0.02	<0.02	----	<0.02	<0.02
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0005	µg/L		----	----	<0.0005	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L		<0.02	<0.02	----	<0.02	<0.02
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0005	µg/L		----	----	<0.0005	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L		<0.02	<0.02	----	<0.02	<0.02
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0005	µg/L		----	----	<0.0005	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L		<0.02	<0.02	----	<0.02	<0.02
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	µg/L		----	----	<0.0005	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L		<0.05	<0.05	----	<0.05	<0.05
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0005	µg/L		----	----	<0.0005	----	----
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L		<0.02	<0.02	----	<0.02	<0.02
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.001	µg/L		----	----	<0.001	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L		<0.05	<0.05	----	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.001	µg/L		----	----	<0.001	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_QC106_250402	0021_QC107_250403	0021_QC108_250403	0021_QC109_250404	0021_QC134_250401
				Sampling date / time	02-Apr-2025 09:30	03-Apr-2025 10:00	03-Apr-2025 12:15	04-Apr-2025 09:30	01-Apr-2025 15:45
Compound	CAS Number	LOR	Unit		ES2510113-072	ES2510113-073	ES2510113-074	ES2510113-075	ES2510113-078
					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
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.001	µg/L		----	----	<0.001	----	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L		<0.05	<0.05	----	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.001	µg/L		----	----	<0.001	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L		<0.05	<0.05	----	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0005	µg/L		----	----	<0.0005	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L		<0.02	<0.02	----	<0.02	<0.02
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0005	µg/L		----	----	<0.0005	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L		<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	0.001	µg/L		----	----	<0.001	----	----
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L		<0.05	<0.05	----	<0.05	<0.05
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.001	µg/L		----	----	<0.001	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L		<0.05	<0.05	----	<0.05	<0.05
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.001	µg/L		----	----	<0.001	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L		<0.05	<0.05	----	<0.05	<0.05

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_QC106_250402	0021_QC107_250403	0021_QC108_250403	0021_QC109_250404	0021_QC134_250401
				Sampling date / time	02-Apr-2025 09:30	03-Apr-2025 10:00	03-Apr-2025 12:15	04-Apr-2025 09:30	01-Apr-2025 15:45
Compound	CAS Number	LOR	Unit		ES2510113-072	ES2510113-073	ES2510113-074	ES2510113-075	ES2510113-078
					Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued									
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.001	µg/L		----	----	<0.001	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L		<0.05	<0.05	----	<0.05	<0.05
EP231P: PFAS Sums									
Sum of PFAS	----	0.0003	µg/L		----	----	**0.0004**	----	----
Sum of PFAS	----	0.01	µg/L		**0.55**	<0.01	----	<0.01	**0.34**
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0003	µg/L		----	----	**0.0004**	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		**0.47**	<0.01	----	<0.01	**0.32**
Sum of PFAS (WA DER List)	----	0.0003	µg/L		----	----	**0.0004**	----	----
Sum of PFAS (WA DER List)	----	0.01	µg/L		**0.53**	<0.01	----	<0.01	**0.34**
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0005	%		----	----	**96.9**	----	----
13C4-PFOS	----	0.02	%		**104**	**104**	----	**103**	**105**
13C8-PFOA	----	0.0005	%		----	----	**108**	----	----
13C8-PFOA	----	0.02	%		**110**	**114**	----	**118**	**117**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_QC136_250402	0021_QC140_250404	0021_QC154_250401	0021_QC155_250402	0021_QC156_250403
				Sampling date / time	02-Apr-2025 00:00	04-Apr-2025 08:58	01-Apr-2025 13:41	02-Apr-2025 10:18	03-Apr-2025 11:38
Compound	CAS Number	LOR	Unit		ES2510113-080	ES2510113-082	ES2510113-084	ES2510113-085	ES2510113-086
					Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		<0.02	**0.37**	<0.02	<0.02	**0.09**
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		<0.02	**0.60**	<0.02	<0.02	**0.11**
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		<0.01	**6.36**	<0.01	**0.03**	**1.42**
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		<0.02	**0.81**	<0.02	<0.02	**0.06**
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		<0.01	**18.5**	<0.01	<0.01	**1.86**
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	**0.18**	<0.02	<0.02	**0.12**
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		<0.02	**0.78**	<0.02	<0.02	**0.34**
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		<0.02	**0.12**	<0.02	<0.02	**0.04**
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		<0.01	**0.71**	<0.01	<0.01	**0.11**
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_QC136_250402	0021_QC140_250404	0021_QC154_250401	0021_QC155_250402	0021_QC156_250403
				Sampling date / time	02-Apr-2025 00:00	04-Apr-2025 08:58	01-Apr-2025 13:41	02-Apr-2025 10:18	03-Apr-2025 11:38
Compound	CAS Number	LOR	Unit		ES2510113-080	ES2510113-082	ES2510113-084	ES2510113-085	ES2510113-086
					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	**28.6**	<0.01	**0.03**	**4.19**
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		<0.01	**24.9**	<0.01	**0.03**	**3.28**
Sum of PFAS (WA DER List)	----	0.01	µg/L		<0.01	**27.0**	<0.01	**0.03**	**3.98**
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**98.3**	**106**	**108**	**102**	**96.0**
13C8-PFOA	----	0.02	%		**115**	**110**	**114**	**113**	**116**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_QC157_250407	----	----	----	----
				Sampling date / time	07-Apr-2025 12:24	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2510113-087	--------	--------	--------	--------
					Result	----	----	----	----
EP231A: Perfluoroalkyl Sulfonic Acids									
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		**0.06**	----	----	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L		<0.02	----	----	----	----
EP231B: Perfluoroalkyl Carboxylic Acids									
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	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_QC157_250407	----	----	----	----
				Sampling date / time	07-Apr-2025 12:24	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2510113-087	--------	--------	--------	--------
					Result	----	----	----	----
EP231C: Perfluoroalkyl Sulfonamides - Continued									
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	----	----	----	----
EP231P: PFAS Sums									
Sum of PFAS	----	0.01	µg/L		**0.07**	----	----	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		**0.07**	----	----	----	----
Sum of PFAS (WA DER List)	----	0.01	µg/L		**0.07**	----	----	----	----
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**103**	----	----	----	----
13C8-PFOA	----	0.02	%		**113**	----	----	----	----

Surrogate Control Limits

Sub-Matrix: SEDIMENT		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP231S: PFAS Surrogate			
13C8-PFOA	----	60	120
13C4-PFOS	----	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	: **ES2510113**	Page	: 1 of 15
Amendment	: **2**		
Client	: **GHD PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MS HELEN MILNE	Telephone	: +61-2-8784 8555
Project	: 12626622	Date Samples Received	: 08-Apr-2025
Site	: ----	Issue Date	: 29-Apr-2025
Sampler	: Jarrad Mawbey	No. of samples received	: 87
Order number	: 12626622	No. of samples analysed	: 87

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

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

Summary of Outliers

Outliers : Quality Control Samples

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

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

Outliers : Analysis Holding Time Compliance

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

Outliers : Frequency of Quality Control Samples

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

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **WATER**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Matrix Spike (MS) Recoveries							
EP231A: Perfluoroalkyl Sulfonic Acids	ES2510113--008	0021_MW028_250402	**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	ES2510113--062	0021_MW164_250402	**Perfluorooctane sulfonic acid (PFOS)**	1763-23-1	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**

Analysis Holding Time Compliance

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

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

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

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

Matrix: **SOIL**

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
EA055: Moisture Content (Dried @ 105-110°C)							
HDPE Soil Jar (EA055) 0021_QC104_250401	**01-Apr-2025**	**----**	----	**----**	**15-Apr-2025**	15-Apr-2025	✓
HDPE Soil Jar (EA055) 0021_QC135_250402	**02-Apr-2025**	**----**	----	**----**	**15-Apr-2025**	16-Apr-2025	✓
HDPE Soil Jar (EA055) 0021_QC139_250403	**03-Apr-2025**	**----**	----	**----**	**15-Apr-2025**	17-Apr-2025	✓
HDPE Soil Jar (EA055) 0021_QC110_250404, 0021_QC111_250404, 0021_QC141_250404	**04-Apr-2025**	**----**	----	**----**	**15-Apr-2025**	18-Apr-2025	✓
EP231A: Perfluoroalkyl Sulfonic Acids							
HDPE Soil Jar (EP231X-SD) 0021_QC104_250401	**01-Apr-2025**	**14-Apr-2025**	28-Sep-2025	✓	**16-Apr-2025**	24-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_QC135_250402	**02-Apr-2025**	**14-Apr-2025**	29-Sep-2025	✓	**16-Apr-2025**	24-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_QC139_250403	**03-Apr-2025**	**14-Apr-2025**	30-Sep-2025	✓	**16-Apr-2025**	24-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_QC110_250404, 0021_QC111_250404, 0021_QC141_250404	**04-Apr-2025**	**14-Apr-2025**	01-Oct-2025	✓	**16-Apr-2025**	24-May-2025	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231B: Perfluoroalkyl Carboxylic Acids								
HDPE Soil Jar (EP231X-SD) 0021_QC104_250401		**01-Apr-2025**	**14-Apr-2025**	28-Sep-2025	✓	**16-Apr-2025**	24-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_QC135_250402		**02-Apr-2025**	**14-Apr-2025**	29-Sep-2025	✓	**16-Apr-2025**	24-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_QC139_250403		**03-Apr-2025**	**14-Apr-2025**	30-Sep-2025	✓	**16-Apr-2025**	24-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_QC110_250404, 0021_QC141_250404	0021_QC111_250404,	**04-Apr-2025**	**14-Apr-2025**	01-Oct-2025	✓	**16-Apr-2025**	24-May-2025	✓
EP231C: Perfluoroalkyl Sulfonamides								
HDPE Soil Jar (EP231X-SD) 0021_QC104_250401		**01-Apr-2025**	**14-Apr-2025**	28-Sep-2025	✓	**16-Apr-2025**	24-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_QC135_250402		**02-Apr-2025**	**14-Apr-2025**	29-Sep-2025	✓	**16-Apr-2025**	24-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_QC139_250403		**03-Apr-2025**	**14-Apr-2025**	30-Sep-2025	✓	**16-Apr-2025**	24-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_QC110_250404, 0021_QC141_250404	0021_QC111_250404,	**04-Apr-2025**	**14-Apr-2025**	01-Oct-2025	✓	**16-Apr-2025**	24-May-2025	✓
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
HDPE Soil Jar (EP231X-SD) 0021_QC104_250401		**01-Apr-2025**	**14-Apr-2025**	28-Sep-2025	✓	**16-Apr-2025**	24-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_QC135_250402		**02-Apr-2025**	**14-Apr-2025**	29-Sep-2025	✓	**16-Apr-2025**	24-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_QC139_250403		**03-Apr-2025**	**14-Apr-2025**	30-Sep-2025	✓	**16-Apr-2025**	24-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_QC110_250404, 0021_QC141_250404	0021_QC111_250404,	**04-Apr-2025**	**14-Apr-2025**	01-Oct-2025	✓	**16-Apr-2025**	24-May-2025	✓
EP231P: PFAS Sums								
HDPE Soil Jar (EP231X-SD) 0021_QC104_250401		**01-Apr-2025**	**14-Apr-2025**	28-Sep-2025	✓	**16-Apr-2025**	24-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_QC135_250402		**02-Apr-2025**	**14-Apr-2025**	29-Sep-2025	✓	**16-Apr-2025**	24-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_QC139_250403		**03-Apr-2025**	**14-Apr-2025**	30-Sep-2025	✓	**16-Apr-2025**	24-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_QC110_250404, 0021_QC141_250404	0021_QC111_250404,	**04-Apr-2025**	**14-Apr-2025**	01-Oct-2025	✓	**16-Apr-2025**	24-May-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 / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231A: Perfluoroalkyl Sulfonic Acids							
HDPE (no PTFE) (EP231X) 0021_MW024_250401, 0021_MW060_250401, 0021_MW110_250401, 0021_MW112_250401, 0021_MW126_250401, 0021_MW131_250401, 0021_MW132_250401, 0021_QC103_250401, 0021_QC105_250401, 0021_QC134_250401, 0021_QC154_250401	**01-Apr-2025**	**14-Apr-2025**	28-Sep-2025	✓	**16-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0021_MW021_250401, 0021_MW022_250401	**01-Apr-2025**	**14-Apr-2025**	28-Sep-2025	✓	**17-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0021_MW025_250402, 0021_MW028_250402, 0021_MW117_250402, 0021_MW118_250402, 0021_MW119_250402, 0021_MW120_250402, 0021_MW121_250402, 0021_MW123_250402, 0021_MW125_250402, 0021_MW127_250402, 0021_MW128_250402, 0021_MW133_250402, 0021_MW160_250402, 0021_MW163_250402, 0021_MW164_250402, 0021_QC106_250402, 0021_QC136_250402, 0021_QC155_250402	**02-Apr-2025**	**14-Apr-2025**	29-Sep-2025	✓	**16-Apr-2025**	29-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0021_MW018_250402, 0021_MW020_250402	**02-Apr-2025**	**14-Apr-2025**	29-Sep-2025	✓	**17-Apr-2025**	29-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0021_MW030_250403, 0021_MW063_250403, 0021_MW064_250403, 0021_MW065_250403, 0021_MW103_250403, 0021_MW104_250403, 0021_MW105_250403, 0021_MW107_250403, 0021_MW109_250403, 0021_MW124_250403, 0021_MW138_250403, 0021_MW139_250403, 0021_MW140_250403, 0021_QC107_250403, 0021_QC108_250403, 0021_QC156_250403	**03-Apr-2025**	**14-Apr-2025**	30-Sep-2025	✓	**16-Apr-2025**	30-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0021_MW101_250404, 0021_MW102_250404, 0021_MW106_250404, 0021_MW108_250404, 0021_MW114_250404, 0021_MW129_250404, 0021_MW130_250404, 0021_MW135_250404, 0021_MW136_250404, 0021_MW137_250404, 0021_MW150_250404, 0021_MW151_250404, 0021_MW153_250404, 0021_MW154_250404, 0021_MW155_250404, 0021_QC109_250404, 0021_QC140_250404	**04-Apr-2025**	**14-Apr-2025**	01-Oct-2025	✓	**16-Apr-2025**	01-Oct-2025	✓
HDPE (no PTFE) (EP231X)							

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231A: Perfluoroalkyl Sulfonic Acids - Continued							
0021_MW026_250407, 0021_MW070_250407, 0021_MW071_250407, 0021_MW072_250407, 0021_MW113_250407, 0021_OTH001_250407, 0021_OTH002_250407, 0021_OTH003_250407, 0021_OTH005_250407, 0021_OTH006_250407, 0021_QC157_250407	**07-Apr-2025**	**14-Apr-2025**	04-Oct-2025	✓	**16-Apr-2025**	04-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0021_MW111_250408, 0021_MW134_250408, 0021_MW152_250408	**08-Apr-2025**	**14-Apr-2025**	05-Oct-2025	✓	**16-Apr-2025**	05-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0021_QC102_250331	**31-Mar-2025**	**14-Apr-2025**	27-Sep-2025	✓	**16-Apr-2025**	27-Sep-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
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE (no PTFE) (EP231X) 0021_MW024_250401, 0021_MW060_250401, 0021_MW110_250401, 0021_MW112_250401, 0021_MW126_250401, 0021_MW131_250401, 0021_MW132_250401, 0021_QC103_250401, 0021_QC105_250401, 0021_QC134_250401, 0021_QC154_250401	**01-Apr-2025**	**14-Apr-2025**	28-Sep-2025	✓	**16-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0021_MW021_250401, 0021_MW022_250401	**01-Apr-2025**	**14-Apr-2025**	28-Sep-2025	✓	**17-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0021_MW025_250402, 0021_MW028_250402, 0021_MW117_250402, 0021_MW118_250402, 0021_MW119_250402, 0021_MW120_250402, 0021_MW121_250402, 0021_MW123_250402, 0021_MW125_250402, 0021_MW127_250402, 0021_MW128_250402, 0021_MW133_250402, 0021_MW160_250402, 0021_MW163_250402, 0021_MW164_250402, 0021_QC106_250402, 0021_QC136_250402, 0021_QC155_250402	**02-Apr-2025**	**14-Apr-2025**	29-Sep-2025	✓	**16-Apr-2025**	29-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0021_MW018_250402, 0021_MW020_250402	**02-Apr-2025**	**14-Apr-2025**	29-Sep-2025	✓	**17-Apr-2025**	29-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0021_MW030_250403, 0021_MW063_250403, 0021_MW064_250403, 0021_MW065_250403, 0021_MW103_250403, 0021_MW104_250403, 0021_MW105_250403, 0021_MW107_250403, 0021_MW109_250403, 0021_MW124_250403, 0021_MW138_250403, 0021_MW139_250403, 0021_MW140_250403, 0021_QC107_250403, 0021_QC108_250403, 0021_QC156_250403	**03-Apr-2025**	**14-Apr-2025**	30-Sep-2025	✓	**16-Apr-2025**	30-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0021_MW101_250404, 0021_MW102_250404, 0021_MW106_250404, 0021_MW108_250404, 0021_MW114_250404, 0021_MW129_250404, 0021_MW130_250404, 0021_MW135_250404, 0021_MW136_250404, 0021_MW137_250404, 0021_MW150_250404, 0021_MW151_250404, 0021_MW153_250404, 0021_MW154_250404, 0021_MW155_250404, 0021_QC109_250404, 0021_QC140_250404	**04-Apr-2025**	**14-Apr-2025**	01-Oct-2025	✓	**16-Apr-2025**	01-Oct-2025	✓
HDPE (no PTFE) (EP231X)							

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231B: Perfluoroalkyl Carboxylic Acids - Continued							
0021_MW026_250407, 0021_MW070_250407, 0021_MW071_250407, 0021_MW072_250407, 0021_MW113_250407, 0021_OTH001_250407, 0021_OTH002_250407, 0021_OTH003_250407, 0021_OTH005_250407, 0021_OTH006_250407, 0021_QC157_250407	**07-Apr-2025**	**14-Apr-2025**	04-Oct-2025	✓	**16-Apr-2025**	04-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0021_MW111_250408, 0021_MW134_250408, 0021_MW152_250408	**08-Apr-2025**	**14-Apr-2025**	05-Oct-2025	✓	**16-Apr-2025**	05-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0021_QC102_250331	**31-Mar-2025**	**14-Apr-2025**	27-Sep-2025	✓	**16-Apr-2025**	27-Sep-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
EP231C: Perfluoroalkyl Sulfonamides							
HDPE (no PTFE) (EP231X) 0021_MW024_250401, 0021_MW060_250401, 0021_MW110_250401, 0021_MW112_250401, 0021_MW126_250401, 0021_MW131_250401, 0021_MW132_250401, 0021_QC103_250401, 0021_QC105_250401, 0021_QC134_250401, 0021_QC154_250401	**01-Apr-2025**	**14-Apr-2025**	28-Sep-2025	✓	**16-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0021_MW021_250401, 0021_MW022_250401	**01-Apr-2025**	**14-Apr-2025**	28-Sep-2025	✓	**17-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0021_MW025_250402, 0021_MW028_250402, 0021_MW117_250402, 0021_MW118_250402, 0021_MW119_250402, 0021_MW120_250402, 0021_MW121_250402, 0021_MW123_250402, 0021_MW125_250402, 0021_MW127_250402, 0021_MW128_250402, 0021_MW133_250402, 0021_MW160_250402, 0021_MW163_250402, 0021_MW164_250402, 0021_QC106_250402, 0021_QC136_250402, 0021_QC155_250402	**02-Apr-2025**	**14-Apr-2025**	29-Sep-2025	✓	**16-Apr-2025**	29-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0021_MW018_250402, 0021_MW020_250402	**02-Apr-2025**	**14-Apr-2025**	29-Sep-2025	✓	**17-Apr-2025**	29-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0021_MW030_250403, 0021_MW063_250403, 0021_MW064_250403, 0021_MW065_250403, 0021_MW103_250403, 0021_MW104_250403, 0021_MW105_250403, 0021_MW107_250403, 0021_MW109_250403, 0021_MW124_250403, 0021_MW138_250403, 0021_MW139_250403, 0021_MW140_250403, 0021_QC107_250403, 0021_QC108_250403, 0021_QC156_250403	**03-Apr-2025**	**14-Apr-2025**	30-Sep-2025	✓	**16-Apr-2025**	30-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0021_MW101_250404, 0021_MW102_250404, 0021_MW106_250404, 0021_MW108_250404, 0021_MW114_250404, 0021_MW129_250404, 0021_MW130_250404, 0021_MW135_250404, 0021_MW136_250404, 0021_MW137_250404, 0021_MW150_250404, 0021_MW151_250404, 0021_MW153_250404, 0021_MW154_250404, 0021_MW155_250404, 0021_QC109_250404, 0021_QC140_250404	**04-Apr-2025**	**14-Apr-2025**	01-Oct-2025	✓	**16-Apr-2025**	01-Oct-2025	✓
HDPE (no PTFE) (EP231X)							

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
EP231C: Perfluoroalkyl Sulfonamides - Continued							
0021_MW026_250407, 0021_MW070_250407, 0021_MW071_250407, 0021_MW072_250407, 0021_MW113_250407, 0021_OTH001_250407, 0021_OTH002_250407, 0021_OTH003_250407, 0021_OTH005_250407, 0021_OTH006_250407, 0021_QC157_250407	**07-Apr-2025**	**14-Apr-2025**	04-Oct-2025	✓	**16-Apr-2025**	04-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0021_MW111_250408, 0021_MW134_250408, 0021_MW152_250408	**08-Apr-2025**	**14-Apr-2025**	05-Oct-2025	✓	**16-Apr-2025**	05-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0021_QC102_250331	**31-Mar-2025**	**14-Apr-2025**	27-Sep-2025	✓	**16-Apr-2025**	27-Sep-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
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE (no PTFE) (EP231X)							
0021_MW024_250401, 0021_MW060_250401, 0021_MW110_250401, 0021_MW112_250401, 0021_MW126_250401, 0021_MW131_250401, 0021_MW132_250401, 0021_QC103_250401, 0021_QC105_250401, 0021_QC134_250401, 0021_QC154_250401	**01-Apr-2025**	**14-Apr-2025**	28-Sep-2025	✓	**16-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X)							
0021_MW021_250401, 0021_MW022_250401	**01-Apr-2025**	**14-Apr-2025**	28-Sep-2025	✓	**17-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X)							
0021_MW025_250402, 0021_MW028_250402, 0021_MW117_250402, 0021_MW118_250402, 0021_MW119_250402, 0021_MW120_250402, 0021_MW121_250402, 0021_MW123_250402, 0021_MW125_250402, 0021_MW127_250402, 0021_MW128_250402, 0021_MW133_250402, 0021_MW160_250402, 0021_MW163_250402, 0021_MW164_250402, 0021_QC106_250402, 0021_QC136_250402, 0021_QC155_250402	**02-Apr-2025**	**14-Apr-2025**	29-Sep-2025	✓	**16-Apr-2025**	29-Sep-2025	✓
HDPE (no PTFE) (EP231X)							
0021_MW018_250402, 0021_MW020_250402	**02-Apr-2025**	**14-Apr-2025**	29-Sep-2025	✓	**17-Apr-2025**	29-Sep-2025	✓
HDPE (no PTFE) (EP231X)							
0021_MW030_250403, 0021_MW063_250403, 0021_MW064_250403, 0021_MW065_250403, 0021_MW103_250403, 0021_MW104_250403, 0021_MW105_250403, 0021_MW107_250403, 0021_MW109_250403, 0021_MW124_250403, 0021_MW138_250403, 0021_MW139_250403, 0021_MW140_250403, 0021_QC107_250403, 0021_QC108_250403, 0021_QC156_250403	**03-Apr-2025**	**14-Apr-2025**	30-Sep-2025	✓	**16-Apr-2025**	30-Sep-2025	✓
HDPE (no PTFE) (EP231X)							
0021_MW101_250404, 0021_MW102_250404, 0021_MW106_250404, 0021_MW108_250404, 0021_MW114_250404, 0021_MW129_250404, 0021_MW130_250404, 0021_MW135_250404, 0021_MW136_250404, 0021_MW137_250404, 0021_MW150_250404, 0021_MW151_250404, 0021_MW153_250404, 0021_MW154_250404, 0021_MW155_250404, 0021_QC109_250404, 0021_QC140_250404	**04-Apr-2025**	**14-Apr-2025**	01-Oct-2025	✓	**16-Apr-2025**	01-Oct-2025	✓
HDPE (no PTFE) (EP231X)							

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued							
0021_MW026_250407, 0021_MW070_250407, 0021_MW071_250407, 0021_MW072_250407, 0021_MW113_250407, 0021_OTH001_250407, 0021_OTH002_250407, 0021_OTH003_250407, 0021_OTH005_250407, 0021_OTH006_250407, 0021_QC157_250407	**07-Apr-2025**	**14-Apr-2025**	04-Oct-2025	✓	**16-Apr-2025**	04-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0021_MW111_250408, 0021_MW134_250408, 0021_MW152_250408	**08-Apr-2025**	**14-Apr-2025**	05-Oct-2025	✓	**16-Apr-2025**	05-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0021_QC102_250331	**31-Mar-2025**	**14-Apr-2025**	27-Sep-2025	✓	**16-Apr-2025**	27-Sep-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
EP231P: PFAS Sums							
HDPE (no PTFE) (EP231X)							
0021_MW024_250401, 0021_MW060_250401, 0021_MW110_250401, 0021_MW112_250401, 0021_MW126_250401, 0021_MW131_250401, 0021_MW132_250401, 0021_QC103_250401, 0021_QC105_250401, 0021_QC134_250401, 0021_QC154_250401	**01-Apr-2025**	**14-Apr-2025**	28-Sep-2025	✓	**16-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X)							
0021_MW021_250401, 0021_MW022_250401	**01-Apr-2025**	**14-Apr-2025**	28-Sep-2025	✓	**17-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X)							
0021_MW025_250402, 0021_MW028_250402, 0021_MW117_250402, 0021_MW118_250402, 0021_MW119_250402, 0021_MW120_250402, 0021_MW121_250402, 0021_MW123_250402, 0021_MW125_250402, 0021_MW127_250402, 0021_MW128_250402, 0021_MW133_250402, 0021_MW160_250402, 0021_MW163_250402, 0021_MW164_250402, 0021_QC106_250402, 0021_QC136_250402, 0021_QC155_250402	**02-Apr-2025**	**14-Apr-2025**	29-Sep-2025	✓	**16-Apr-2025**	29-Sep-2025	✓
HDPE (no PTFE) (EP231X)							
0021_MW018_250402, 0021_MW020_250402	**02-Apr-2025**	**14-Apr-2025**	29-Sep-2025	✓	**17-Apr-2025**	29-Sep-2025	✓
HDPE (no PTFE) (EP231X)							
0021_MW030_250403, 0021_MW063_250403, 0021_MW064_250403, 0021_MW065_250403, 0021_MW103_250403, 0021_MW104_250403, 0021_MW105_250403, 0021_MW107_250403, 0021_MW109_250403, 0021_MW124_250403, 0021_MW138_250403, 0021_MW139_250403, 0021_MW140_250403, 0021_QC107_250403, 0021_QC108_250403, 0021_QC156_250403	**03-Apr-2025**	**14-Apr-2025**	30-Sep-2025	✓	**16-Apr-2025**	30-Sep-2025	✓
HDPE (no PTFE) (EP231X)							
0021_MW101_250404, 0021_MW102_250404, 0021_MW106_250404, 0021_MW108_250404, 0021_MW114_250404, 0021_MW129_250404, 0021_MW130_250404, 0021_MW135_250404, 0021_MW136_250404, 0021_MW137_250404, 0021_MW150_250404, 0021_MW151_250404, 0021_MW153_250404, 0021_MW154_250404, 0021_MW155_250404, 0021_QC109_250404, 0021_QC140_250404	**04-Apr-2025**	**14-Apr-2025**	01-Oct-2025	✓	**16-Apr-2025**	01-Oct-2025	✓
HDPE (no PTFE) (EP231X)							

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
EP231P: PFAS Sums - Continued							
0021_MW026_250407, 0021_MW070_250407, 0021_MW071_250407, 0021_MW072_250407, 0021_MW113_250407, 0021_OTH001_250407, 0021_OTH002_250407, 0021_OTH003_250407, 0021_OTH005_250407, 0021_OTH006_250407, 0021_QC157_250407	**07-Apr-2025**	**14-Apr-2025**	04-Oct-2025	✓	**16-Apr-2025**	04-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0021_MW111_250408, 0021_MW134_250408, 0021_MW152_250408	**08-Apr-2025**	**14-Apr-2025**	05-Oct-2025	✓	**16-Apr-2025**	05-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0021_QC102_250331	**31-Mar-2025**	**14-Apr-2025**	27-Sep-2025	✓	**16-Apr-2025**	27-Sep-2025	✓

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	8	**25.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-SD	2	17	**11.76**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-SD	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-SD	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-SD	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		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	10	95	**10.53**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-ST	2	12	**16.67**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	5	95	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-ST	1	12	**8.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	5	95	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-ST	1	12	**8.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	5	95	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-ST	1	12	**8.33**	**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-SD	SOIL	In-house: Analysis of sediments 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-ST	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	: **ES2510113**	Page	: 1 of 33
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	: 12626622	Date Samples Received	: 08-Apr-2025
Order number	: 12626622	Date Analysis Commenced	: 14-Apr-2025
C-O-C number	: ----	Issue Date	: 29-Apr-2025
Sampler	: Jarrad Mawbey		
Site	: ----		
Quote number	: ES23GHDSER0026		
No. of samples received	: 87		
No. of samples analysed	: 87		

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
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic 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**

				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: 6510917)									
ES2510113-070	0021_QC104_250401	EA055: Moisture Content	----	0.1	%	18.3	19.0	3.7	0% - 20%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 6511277)									
ES2510113-077	0021_QC111_250404	EA055: Moisture Content	----	0.1	%	38.5	39.6	2.9	0% - 20%
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 6508447)									
ES2510113-070	0021_QC104_250401	EP231X-SD: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	0.0005	0.0004	0.0	No Limit
		EP231X-SD: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
ES2510618-031	Anonymous	EP231X-SD: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	0.0017	0.0016	0.0	No Limit
		EP231X-SD: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	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 (%)*
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 6508447) - continued									
ES2510618-031	Anonymous	EP231X-SD: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 6508447)									
ES2510113-070	0021_QC104_250401	EP231X-SD: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
ES2510618-031	Anonymous	EP231X-SD: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 6508447)									
ES2510113-070	0021_QC104_250401	EP231X-SD: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: 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: 6508447) - continued									
ES2510113-070	0021_QC104_250401	EP231X-SD: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
ES2510618-031	Anonymous	EP231X-SD: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 6508447)									
ES2510113-070	0021_QC104_250401	EP231X-SD: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
ES2510618-031	Anonymous	EP231X-SD: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 6508447)									

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 (%)
EP231P: PFAS Sums (QC Lot: 6508447) - continued									
ES2510113-070	0021_QC104_250401	EP231X-SD: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	0.0005	0.0004	22.2	No Limit
		EP231X-SD: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	0.0005	0.0004	22.2	No Limit
		EP231X-SD: Sum of PFAS	----	0.0002	mg/kg	0.0005	0.0004	22.2	No Limit
ES2510618-031	Anonymous	EP231X-SD: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	0.0019	0.0016	17.1	No Limit
		EP231X-SD: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	0.0019	0.0016	17.1	No Limit
		EP231X-SD: Sum of PFAS	----	0.0002	mg/kg	0.0019	0.0016	17.1	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: 6507380)									
ES2510113-048	0021_MW135_250404	EP231X-ST: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0003	µg/L	0.0020	0.0023	15.0	No Limit
		EP231X-ST: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
ES2510622-068	Anonymous	EP231X-ST: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0003	µg/L	0.0007	0.0008	0.0	No Limit
		EP231X-ST: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 6507723)									
ES2510113-002	0021_MW020_250402	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

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: 6507723) - continued									
ES2510113-002	0021_MW020_250402	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
ES2510113-003	0021_MW021_250401	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: 6507731)									
ES2510113-005	0021_MW024_250401	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
ES2510113-014	0021_MW070_250407	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01 (0.05)*	µg/L	5.92	5.51	7.1	0% - 20%
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01 (0.05)*	µg/L	40.4	35.2	13.6	0% - 20%
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	0.11	0.11	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	0.27	0.26	5.3	0% - 50%
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	0.71	0.73	3.0	0% - 20%
		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: 6507734)									
ES2510113-030	0021_MW114_250404	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
ES2510113-036	0021_MW123_250402	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	1.03	0.96	7.3	0% - 20%
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	0.70	0.71	1.9	0% - 20%
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	0.06	0.06	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	0.13	0.12	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	0.11	0.12	9.0	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: 6508006)									
ES2510113-054	0021_MW150_250404	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	3.60	3.60	0.0	0% - 20%
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01 (0.04)*	µg/L	19.9	22.8	13.4	0% - 20%

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 6508006) - continued									
ES2510113-054	0021_MW150_250404	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	0.10	0.10	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	0.22	0.21	5.7	0% - 50%
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	0.70	0.69	2.1	0% - 20%
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
ES2510113-062	0021_MW164_250402	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	0.26	0.25	0.0	0% - 20%
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	2.86	2.64	8.0	0% - 20%
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 6508015)									
ES2510113-071	0021_QC105_250401	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
ES2510286-003	Anonymous	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	0.63	0.61	3.7	0% - 20%
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	4.28	4.28	0.0	0% - 20%
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	0.03	0.03	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	0.05	0.04	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	0.05	0.05	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: 6507380)									
ES2510113-048	0021_MW135_250404	EP231X-ST: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluorooctanoic acid (PFOA)	335-67-1	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluorononanoic acid (PFNA)	375-95-1	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluorodecanoic acid (PFDA)	335-76-2	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluorobutanoic acid (PFBA)	375-22-4	0.002	µg/L	<0.002	<0.002	0.0	No Limit
ES2510622-068	Anonymous	EP231X-ST: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0005	µg/L	<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 (%)*
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 6507380) - continued									
ES2510622-068	Anonymous	EP231X-ST: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluorooctanoic acid (PFOA)	335-67-1	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluorononanoic acid (PFNA)	375-95-1	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluorodecanoic acid (PFDA)	335-76-2	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluorobutanoic acid (PFBA)	375-22-4	0.002	µg/L	<0.002	<0.002	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 6507723)									
ES2510113-002	0021_MW020_250402	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
ES2510113-003	0021_MW021_250401	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 6507731)									
ES2510113-005	0021_MW024_250401	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

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: 6507731) - continued									
ES2510113-005	0021_MW024_250401	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
ES2510113-014	0021_MW070_250407	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	0.30	0.29	0.0	0% - 20%
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	0.07	0.07	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	0.40	0.39	3.0	0% - 20%
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	0.08	0.08	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 6507734)									
ES2510113-030	0021_MW114_250404	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
ES2510113-036	0021_MW123_250402	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	0.07	0.07	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	0.04	0.03	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	0.13	0.14	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	0.03	0.03	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit

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: 6507734) - continued									
ES2510113-036	0021_MW123_250402	EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 6508006)									
ES2510113-054	0021_MW150_250404	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	0.36	0.35	4.5	0% - 20%
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	0.07	0.07	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	0.36	0.36	0.0	0% - 50%
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	0.05	0.05	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
ES2510113-062	0021_MW164_250402	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 6508015)									
ES2510113-071	0021_QC105_250401	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

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: 6508015) - continued									
ES2510113-071	0021_QC105_250401	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
ES2510286-003	Anonymous	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	0.11	0.11	0.0	0% - 50%
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	0.10	0.10	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	0.21	0.21	0.0	0% - 50%
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	0.05	0.05	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 6507380)									
ES2510113-048	0021_MW135_250404	EP231X-ST: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.001	µg/L	<0.001	<0.001	0.0	No Limit
		EP231X-ST: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.001	µg/L	<0.001	<0.001	0.0	No Limit
		EP231X-ST: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.001	µg/L	<0.001	<0.001	0.0	No Limit
		EP231X-ST: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.001	µg/L	<0.001	<0.001	0.0	No Limit
ES2510622-068	Anonymous	EP231X-ST: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.001	µg/L	<0.001	<0.001	0.0	No Limit
		EP231X-ST: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.001	µg/L	<0.001	<0.001	0.0	No Limit
		EP231X-ST: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.001	µg/L	<0.001	<0.001	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: 6507380) - continued									
ES2510622-068	Anonymous	EP231X-ST: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.001	µg/L	<0.001	<0.001	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 6507723)									
ES2510113-002	0021_MW020_250402	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
ES2510113-003	0021_MW021_250401	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: 6507731)									
ES2510113-005	0021_MW024_250401	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: 6507731) - continued									
ES2510113-005	0021_MW024_250401	EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
ES2510113-014	0021_MW070_250407	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: 6507734)									
ES2510113-030	0021_MW114_250404	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
ES2510113-036	0021_MW123_250402	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 sample ID	Sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report					
				LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 6507734) - continued									
ES2510113-036	0021_MW123_250402	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: 6508006)									
ES2510113-054	0021_MW150_250404	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
ES2510113-062	0021_MW164_250402	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: 6508015)									
ES2510113-071	0021_QC105_250401	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: 6508015) - continued									
ES2510113-071	0021_QC105_250401	EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
ES2510286-003	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: 6507380)									
ES2510113-048	0021_MW135_250404	EP231X-ST: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.001	µg/L	<0.001	<0.001	0.0	No Limit
		EP231X-ST: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.001	µg/L	0.016	0.016	0.0	0% - 50%
		EP231X-ST: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.001	µg/L	<0.001	<0.001	0.0	No Limit
		EP231X-ST: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.001	µg/L	<0.001	<0.001	0.0	No Limit
ES2510622-068	Anonymous	EP231X-ST: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.001	µg/L	<0.001	<0.001	0.0	No Limit
		EP231X-ST: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.001	µg/L	<0.001	<0.001	0.0	No Limit
		EP231X-ST: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.001	µg/L	<0.001	<0.001	0.0	No Limit
		EP231X-ST: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.001	µg/L	<0.001	<0.001	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 6507723)									
ES2510113-002	0021_MW020_250402	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

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: 6507723) - continued									
ES2510113-003	0021_MW021_250401	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: 6507731)									
ES2510113-005	0021_MW024_250401	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
ES2510113-014	0021_MW070_250407	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: 6507734)									
ES2510113-030	0021_MW114_250404	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
ES2510113-036	0021_MW123_250402	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 6507734) - continued									
ES2510113-036	0021_MW123_250402	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: 6508006)									
ES2510113-054	0021_MW150_250404	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
ES2510113-062	0021_MW164_250402	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: 6508015)									
ES2510113-071	0021_QC105_250401	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
ES2510286-003	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	0.22	0.24	8.2	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: 6507380)									
ES2510113-048	0021_MW135_250404	EP231X-ST: Sum of PFAS	----	0.0003	µg/L	0.0180	0.0183	1.7	0% - 20%
ES2510622-068	Anonymous	EP231X-ST: Sum of PFAS	----	0.0003	µg/L	0.0007	0.0008	13.3	No Limit
EP231P: PFAS Sums (QC Lot: 6507723)									

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 (%)*
EP231P: PFAS Sums (QC Lot: 6507723) - continued									
ES2510113-002	0021_MW020_250402	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
ES2510113-003	0021_MW021_250401	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 6507731)									
ES2510113-005	0021_MW024_250401	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
ES2510113-014	0021_MW070_250407	EP231X: Sum of PFAS	----	0.01 (0.05)*	µg/L	48.4	42.8	12.3	0% - 20%
EP231P: PFAS Sums (QC Lot: 6507734)									
ES2510113-030	0021_MW114_250404	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
ES2510113-036	0021_MW123_250402	EP231X: Sum of PFAS	----	0.01	µg/L	2.30	2.24	2.6	0% - 20%
EP231P: PFAS Sums (QC Lot: 6508006)									
ES2510113-054	0021_MW150_250404	EP231X: Sum of PFAS	----	0.01 (0.04)*	µg/L	25.4	28.2	10.7	0% - 20%
ES2510113-062	0021_MW164_250402	EP231X: Sum of PFAS	----	0.01	µg/L	3.41	3.13	8.6	0% - 20%
EP231P: PFAS Sums (QC Lot: 6508015)									
ES2510113-071	0021_QC105_250401	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
ES2510286-003	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	5.73	5.72	0.2	0% - 20%

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

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

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6508447)								
EP231X-SD: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	90.0	73.0	123
EP231X-SD: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	88.2	68.0	136
EP231X-SD: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	82.0	67.0	130
EP231X-SD: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	97.4	70.0	132
EP231X-SD: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	107	59.0	134
EP231X-SD: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	0.00125 mg/kg	83.2	72.0	128
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6508447)								
EP231X-SD: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	86.9	64.0	136
EP231X-SD: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	95.8	66.0	139
EP231X-SD: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	96.6	69.0	133
EP231X-SD: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	93.6	69.0	132
EP231X-SD: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	93.0	69.0	133
EP231X-SD: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	92.9	72.0	129
EP231X-SD: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	83.8	70.0	132
EP231X-SD: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	86.6	71.0	131
EP231X-SD: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	102	69.0	135
EP231X-SD: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	0.00125 mg/kg	92.8	69.0	133
EP231X-SD: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	0.00625 mg/kg	88.0	71.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6508447)								
EP231X-SD: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	90.5	67.0	137
EP231X-SD: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	101	68.7	130
EP231X-SD: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	95.5	63.0	144
EP231X-SD: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	0.00312 mg/kg	107	71.6	129
EP231X-SD: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	102	65.1	134
EP231X-SD: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	89.4	61.0	139
EP231X-SD: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	98.3	69.8	131
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6508447)								

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6508447) - continued								
EP231X-SD: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	0.00125 mg/kg	87.9	65.0	137
EP231X-SD: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	0.00125 mg/kg	88.0	64.0	140
EP231X-SD: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	0.00125 mg/kg	86.0	62.0	145
EP231X-SD: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	0.00125 mg/kg	97.2	69.2	143
EP231P: PFAS Sums (QCLot: 6508447)								
EP231X-SD: Sum of PFHxS and PFOS	355-46-4/17 63-23-1	0.0002	mg/kg	<0.0002	----	----	----	----
EP231X-SD: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<0.0002	----	----	----	----
EP231X-SD: Sum of PFAS	----	0.0002	mg/kg	<0.0002	----	----	----	----

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6507380)								
EP231X-ST: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0005	µg/L	<0.0005	0.004 µg/L	84.2	50.0	130
EP231X-ST: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0005	µg/L	<0.0005	0.004 µg/L	86.7	50.0	130
EP231X-ST: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0005	µg/L	<0.0005	0.004 µg/L	87.0	50.0	130
EP231X-ST: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0005	µg/L	<0.0005	0.004 µg/L	94.1	50.0	130
EP231X-ST: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0003	µg/L	<0.0003	0.004 µg/L	91.4	50.0	130
EP231X-ST: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0005	µg/L	<0.0005	0.004 µg/L	91.2	50.0	130
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6507723)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.25 µg/L	91.2	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.25 µg/L	91.6	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.25 µg/L	80.5	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	85.4	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.25 µg/L	82.2	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.25 µg/L	80.0	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6507731)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.25 µg/L	73.2	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.25 µg/L	78.2	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.25 µg/L	73.3	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	90.2	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.25 µg/L	81.5	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.25 µg/L	71.4	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6507734)								

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6507734) - continued								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.25 µg/L	83.6	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.25 µg/L	86.7	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.25 µg/L	84.2	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	97.7	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.25 µg/L	83.7	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.25 µg/L	78.7	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6508006)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.25 µg/L	81.7	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.25 µg/L	88.1	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.25 µg/L	77.2	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	90.5	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.25 µg/L	88.1	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.25 µg/L	75.6	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6508015)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.25 µg/L	79.9	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.25 µg/L	84.0	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.25 µg/L	80.2	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	96.6	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.25 µg/L	93.5	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.25 µg/L	97.1	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6507380)								
EP231X-ST: Perfluorobutanoic acid (PFBA)	375-22-4	0.002	µg/L	<0.002	0.02 µg/L	90.8	30.0	130
EP231X-ST: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0005	µg/L	<0.0005	0.004 µg/L	94.4	50.0	130
EP231X-ST: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0005	µg/L	<0.0005	0.004 µg/L	86.5	50.0	130
EP231X-ST: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0005	µg/L	<0.0005	0.004 µg/L	86.8	50.0	130
EP231X-ST: Perfluorooctanoic acid (PFOA)	335-67-1	0.0005	µg/L	<0.0005	0.004 µg/L	96.6	50.0	130
EP231X-ST: Perfluorononanoic acid (PFNA)	375-95-1	0.0005	µg/L	<0.0005	0.004 µg/L	95.1	50.0	130
EP231X-ST: Perfluorodecanoic acid (PFDA)	335-76-2	0.0005	µg/L	<0.0005	0.004 µg/L	90.6	50.0	130
EP231X-ST: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0005	µg/L	<0.0005	0.004 µg/L	85.2	40.0	130
EP231X-ST: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0005	µg/L	<0.0005	0.004 µg/L	103	40.0	130
EP231X-ST: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0005	µg/L	<0.0005	0.004 µg/L	79.8	40.0	130
EP231X-ST: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	µg/L	<0.0005	0.01 µg/L	99.2	40.0	130
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6507723)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	94.6	73.0	129

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6507723) - continued								
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	86.3	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	90.4	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	90.4	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	87.2	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	85.2	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	83.7	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	90.9	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	88.8	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	112	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6507731)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	84.2	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	79.0	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	77.1	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	85.1	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	83.7	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	84.6	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	81.9	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	74.0	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	77.6	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	68.7	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	72.3	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6507734)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	82.4	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	86.7	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	80.9	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	85.0	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	84.4	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	87.7	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	86.4	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	79.8	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	89.8	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	76.8	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	77.2	71.0	132

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6508006)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	79.5	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	83.1	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	84.1	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	86.1	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	87.9	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	87.6	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	87.2	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	77.9	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	89.7	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	75.5	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	73.4	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6508015)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	86.8	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	92.6	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	72.3	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	79.8	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	109	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	86.3	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	89.4	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	102	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	126	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	111	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	117	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6507380)								
EP231X-ST: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0005	µg/L	<0.0005	0.004 µg/L	89.1	40.0	130
EP231X-ST: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.001	µg/L	<0.001	0.01 µg/L	106	40.0	130
EP231X-ST: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.001	µg/L	<0.001	0.01 µg/L	99.5	40.0	130
EP231X-ST: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.001	µg/L	<0.001	0.01 µg/L	105	40.0	130
EP231X-ST: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.001	µg/L	<0.001	0.01 µg/L	89.4	40.0	130
EP231X-ST: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0005	µg/L	<0.0005	0.004 µg/L	95.0	40.0	130
EP231X-ST: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0005	µg/L	<0.0005	0.004 µg/L	87.2	40.0	130

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6507723)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	89.7	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	97.6	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	111	62.6	147
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	86.3	66.0	145
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	88.1	57.6	145
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	84.7	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	89.4	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6507731)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	83.1	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	93.8	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	91.3	62.6	147
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	87.3	66.0	145
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	90.4	57.6	145
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	91.4	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	80.7	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6507734)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	89.1	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	108	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	104	62.6	147
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	84.6	66.0	145
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	97.6	57.6	145
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	87.1	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	83.5	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6508006)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	91.1	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	124	68.0	141

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6508006) - continued								
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	115	62.6	147
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	89.5	66.0	145
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	94.6	57.6	145
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	95.5	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	85.3	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6508015)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	82.9	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	117	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	89.0	62.6	147
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	90.4	66.0	145
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	102	57.6	145
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	86.1	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	84.1	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6507380)								
EP231X-ST: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.001	µg/L	<0.001	0.004 µg/L	100	50.0	130
EP231X-ST: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.001	µg/L	<0.001	0.004 µg/L	93.0	50.0	130
EP231X-ST: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.001	µg/L	<0.001	0.004 µg/L	93.4	50.0	130
EP231X-ST: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.001	µg/L	<0.001	0.004 µg/L	84.3	50.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6507723)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.25 µg/L	117	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	86.5	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	91.2	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	116	71.4	144
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6507731)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.25 µg/L	80.0	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.25 µg/L	91.8	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	79.3	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	85.3	71.4	144

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6507734)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.25 µg/L	75.0	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.25 µg/L	97.9	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	79.6	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	98.7	71.4	144
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6508006)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.25 µg/L	84.9	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	89.6	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	80.3	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	76.6	71.4	144
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6508015)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.25 µg/L	75.3	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	97.0	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	81.2	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	126	71.4	144
EP231P: PFAS Sums (QCLot: 6507380)								
EP231X-ST: Sum of PFAS	----	0.0003	µg/L	<0.0003	----	----	----	----

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**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6508447)							
ES2510113-070	0021_QC104_250401	EP231X-SD: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.00125 mg/kg	88.2	73.0	123
		EP231X-SD: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.00125 mg/kg	74.2	68.0	136
		EP231X-SD: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.00125 mg/kg	80.9	67.0	130
		EP231X-SD: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.00125 mg/kg	80.7	70.0	132
		EP231X-SD: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.00125 mg/kg	81.5	59.0	134
		EP231X-SD: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.00125 mg/kg	85.2	72.0	128
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6508447)							
ES2510113-070	0021_QC104_250401	EP231X-SD: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.00125 mg/kg	78.8	64.0	136
		EP231X-SD: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.00125 mg/kg	79.1	66.0	139
		EP231X-SD: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.00312 mg/kg	97.3	69.0	133
		EP231X-SD: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.00125 mg/kg	85.0	69.0	132

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6508447) - continued							
ES2510113-070	0021_QC104_250401	EP231X-SD: Perfluorooctanoic acid (PFOA)	335-67-1	0.00125 mg/kg	82.2	69.0	133
		EP231X-SD: Perfluorononanoic acid (PFNA)	375-95-1	0.00125 mg/kg	83.7	72.0	129
		EP231X-SD: Perfluorohexanoic acid (PFHxA)	307-24-4	0.00125 mg/kg	88.6	70.0	132
		EP231X-SD: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.00125 mg/kg	80.6	71.0	131
		EP231X-SD: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.00125 mg/kg	88.9	69.0	135
		EP231X-SD: Perfluorodecanoic acid (PFDA)	335-76-2	0.00125 mg/kg	83.0	69.0	133
		EP231X-SD: Perfluorobutanoic acid (PFBA)	375-22-4	0.00625 mg/kg	85.5	71.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6508447)							
ES2510113-070	0021_QC104_250401	EP231X-SD: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.00125 mg/kg	81.2	67.0	137
		EP231X-SD: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.00312 mg/kg	98.9	68.7	130
		EP231X-SD: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.00125 mg/kg	86.7	63.0	144
		EP231X-SD: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.00312 mg/kg	98.0	71.6	129
		EP231X-SD: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.00312 mg/kg	98.8	65.1	134
		EP231X-SD: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.00125 mg/kg	81.0	61.0	139
		EP231X-SD: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.00312 mg/kg	98.0	69.8	131
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6508447)							
ES2510113-070	0021_QC104_250401	EP231X-SD: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.00125 mg/kg	96.5	65.0	137
		EP231X-SD: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.00125 mg/kg	81.4	64.0	140
		EP231X-SD: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.00125 mg/kg	84.9	62.0	145
		EP231X-SD: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.00125 mg/kg	85.2	69.2	143

Sub-Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6507380)							
ES2510113-049	0021_MW136_250404	EP231X-ST: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.004 µg/L	81.4	50.0	130
		EP231X-ST: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.004 µg/L	82.1	50.0	130
		EP231X-ST: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.004 µg/L	87.2	50.0	130
		EP231X-ST: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.004 µg/L	123	50.0	130
		EP231X-ST: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.004 µg/L	112	50.0	130
		EP231X-ST: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.004 µg/L	76.4	30.0	130
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6507723)							
ES2510113-003	0021_MW021_250401	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.25 µg/L	87.6	72.0	130

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: 6507723) - continued							
ES2510113-003	0021_MW021_250401	EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.25 µg/L	90.6	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.25 µg/L	83.9	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.25 µg/L	85.0	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.25 µg/L	82.3	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.25 µg/L	86.1	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6507731)							
ES2510113-008	0021_MW028_250402	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.25 µg/L	78.4	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.25 µg/L	87.7	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	93.9	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.25 µg/L	112	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.25 µg/L	79.1	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6507734)							
ES2510113-030	0021_MW114_250404	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.25 µg/L	74.2	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.25 µg/L	81.0	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.25 µg/L	78.8	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.25 µg/L	97.3	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.25 µg/L	77.7	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.25 µg/L	78.2	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6508006)							
ES2510113-062	0021_MW164_250402	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.25 µg/L	79.0	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.25 µg/L	85.1	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.25 µg/L	93.1	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.25 µg/L	99.3	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	83.2	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6508015)							
ES2510113-072	0021_QC106_250402	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.25 µg/L	80.2	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.25 µg/L	97.5	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.25 µg/L	90.1	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.25 µg/L	96.3	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.25 µg/L	85.2	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.25 µg/L	95.4	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6507380)							
ES2510113-049	0021_MW136_250404	EP231X-ST: Perfluorobutanoic acid (PFBA)	375-22-4	0.02 µg/L	83.4	30.0	130
		EP231X-ST: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.004 µg/L	95.9	50.0	130

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: 6507380) - continued							
ES2510113-049	0021_MW136_250404	EP231X-ST: Perfluorohexanoic acid (PFHxA)	307-24-4	0.004 µg/L	96.9	50.0	130
		EP231X-ST: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.004 µg/L	78.1	50.0	130
		EP231X-ST: Perfluorooctanoic acid (PFOA)	335-67-1	0.004 µg/L	92.9	50.0	130
		EP231X-ST: Perfluorononanoic acid (PFNA)	375-95-1	0.004 µg/L	82.8	50.0	130
		EP231X-ST: Perfluorodecanoic acid (PFDA)	335-76-2	0.004 µg/L	80.6	50.0	130
		EP231X-ST: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.004 µg/L	79.6	30.0	130
		EP231X-ST: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.004 µg/L	99.1	30.0	130
		EP231X-ST: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.004 µg/L	56.1	30.0	130
		EP231X-ST: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.01 µg/L	102	30.0	130
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6507723)							
ES2510113-003	0021_MW021_250401	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	95.2	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	88.2	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	95.7	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	90.7	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	95.8	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	80.1	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	76.2	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	96.4	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	115	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	85.8	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	111	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6507731)							
ES2510113-008	0021_MW028_250402	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	82.6	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	84.9	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	83.8	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	79.3	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	82.2	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	87.4	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	84.0	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	81.4	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	95.6	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	83.6	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	83.2	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6507734)							
ES2510113-030	0021_MW114_250404	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	79.6	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	82.9	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	85.4	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	82.7	72.0	130

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: 6507734) - continued							
ES2510113-030	0021_MW114_250404	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	84.0	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	83.3	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	80.6	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	73.8	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	83.9	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	70.4	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	77.3	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6508006)							
ES2510113-062	0021_MW164_250402	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	80.4	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	88.1	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	88.4	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	84.7	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	84.0	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	85.9	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	92.6	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	81.9	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	95.8	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	75.9	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	78.5	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6508015)							
ES2510113-072	0021_QC106_250402	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	84.1	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	80.2	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	79.2	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	108	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	90.1	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	101	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	128	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	107	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	113	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6507380)							
ES2510113-049	0021_MW136_250404	EP231X-ST: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.004 µg/L	77.2	30.0	130
		EP231X-ST: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.01 µg/L	102	30.0	130
		EP231X-ST: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.01 µg/L	53.3	30.0	130

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: 6507380) - continued							
ES2510113-049	0021_MW136_250404	EP231X-ST: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.01 µg/L	98.5	30.0	130
		EP231X-ST: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.01 µg/L	101	30.0	130
		EP231X-ST: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.004 µg/L	86.9	30.0	130
		EP231X-ST: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.004 µg/L	82.8	30.0	130
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6507723)							
ES2510113-003	0021_MW021_250401	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	85.8	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	95.3	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	91.2	62.6	147
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	91.1	66.0	145
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	98.7	57.6	145
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	91.8	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	87.2	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6507731)							
ES2510113-008	0021_MW028_250402	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	83.1	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	107	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	84.1	62.6	147
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	82.0	66.0	145
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	91.8	57.6	145
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	102	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	92.5	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6507734)							
ES2510113-030	0021_MW114_250404	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	85.1	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	95.2	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	94.0	62.6	147

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: 6507734) - continued							
ES2510113-030	0021_MW114_250404	EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	83.3	66.0	145
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	89.3	57.6	145
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	96.3	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	90.1	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6508006)							
ES2510113-062	0021_MW164_250402	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	93.4	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	127	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	97.8	62.6	147
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	87.0	66.0	145
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	94.3	57.6	145
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	97.1	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	92.2	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6508015)							
ES2510113-072	0021_QC106_250402	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	91.0	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	124	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	88.4	62.6	147
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	90.6	66.0	145
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	105	57.6	145
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	85.8	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	82.6	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6507380)							
ES2510113-049	0021_MW136_250404	EP231X-ST: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.004 µg/L	89.2	50.0	130
		EP231X-ST: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.004 µg/L	87.4	50.0	130
		EP231X-ST: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.004 µg/L	110	50.0	130
		EP231X-ST: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.004 µg/L	75.7	50.0	130

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: 6507723)							
ES2510113-003	0021_MW021_250401	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.25 µg/L	84.2	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.25 µg/L	85.9	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.25 µg/L	97.9	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.25 µg/L	123	71.4	144
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6507731)							
ES2510113-008	0021_MW028_250402	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.25 µg/L	85.7	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.25 µg/L	100	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.25 µg/L	82.5	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.25 µg/L	86.0	71.4	144
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6507734)							
ES2510113-030	0021_MW114_250404	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.25 µg/L	78.4	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.25 µg/L	69.8	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.25 µg/L	75.0	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.25 µg/L	85.2	71.4	144
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6508006)							
ES2510113-062	0021_MW164_250402	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.25 µg/L	73.6	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.25 µg/L	84.2	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.25 µg/L	87.5	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.25 µg/L	79.8	71.4	144
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6508015)							
ES2510113-072	0021_QC106_250402	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.25 µg/L	75.5	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.25 µg/L	84.2	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	126	71.4	144

CHAIN OF CUSTODY

ALS Laboratory please tick →

CLIENT:	TURNAROUND REQUIREMENT ☐ Standard TAT (List days):		
OFFICE:	☐ Non-standard or urgent TAT (List date):		
PROJECT:	ALS QUOTE NO.:	COC SEQUENCE NUMBER (Circle)	
ORDER NUMBER:		COC 1 2 3 4 5 6 7	
PROJECT MANAGER:	CONTACT PH:	OR 1 2 3 4 5 6 7	
SAMPLER:	SAMPLER MOBILE:	RELINQUISHED BY:	RECEIVED BY:
COC emailed to ALS? (YES / NO)	EDD FORMAT (or default):	DATE/TIME:	DATE/TIME:
Email Reports to:	Email Invoice to:		

| | | |

CHAIN OF CUSTODY

ALS Laboratory Work Order #

CLIENT:	TURNAROUND REQUIREMENT: ☐ Standard TAT (List due date):	
OFFICE:	(Standard TAT may be longer for some tests e.g. Ultra-Trace Organics) ☐ Non-Standard or urgent TAT (List due date):	
PROJECT:	ALS QUOTE NO.:	COC SEQUENCE NUMBER (Circle)
ORDER NUMBER:		CONTACT PH:
PROJECT MANAGER:	CONTACT PH:	
SAMPLER:	SAMPLER MOBILE:	RELINQUISHED BY: / RECEIVED BY: / RELINQUISHED BY: / RECEIVED BY:
COC emailed to ALS? (YES / NO)	EDD FORMAT (or default):	
Email Reports to:		DATE/TIME: / DATE/TIME: / DATE/TIME: / DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

ALS USE ONLY	ALS LAB WORK ORDER #	ALS SAMPLE #	SAMPLE DETAILS			ANALYSIS REQUESTED												
							ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite prices) Within Metals are received, specify: Total (unfiltered bottle required) or Dissolved (field filtered bottle required).											
LAB ID	SAMPLE ID	Date and Time	Matrix	TYPE & PRESERVATIVE (refer to codes below)	TOTAL CONTAINERS	EP231X (PFAS Full Suite)						HOLD						
45	0020_SW010_250331	31 Mar 2025 09:00	W	Ice	2	X												
46	0020_SW011_250402	02 Apr 2025 14:08	W	Ice	2	X												
47	0020_SW012_250331	31 Mar 2025 12:00	W	Ice	2	X												
48	0020_SW016_250331	31 Mar 2025 11:02	W	Ice	2	X												
49	0020_SW019_250331	31 Mar 2025 12:04	W	Ice	6	X												EXTRA SAMPLE FOR LAB QC
50	0020_SW022_250331	31 Mar 2025 13:16	W	Ice	4	X												EXTRA SAMPLE FOR LAB QC
51	0020_SW023_250331	31 Mar 2025 13:36	W	Ice	3	X												
52	0020_SW026_250401	01 Apr 2025 08:47	W	Ice	2	X												
53	0020_SW027_250401	01 Apr 2025 08:31	W	Ice	2	X												
54	0020_SW029_250331	31 Mar 2025 10:55	W	Ice	2	X												
55	0020_SW030_250331	31 Mar 2025 16:24	W	Ice	2	X												
56	0020_SW032_250331	31 Mar 2025 16:06	W	Ice	2	X												
57	0020_SW033_250401	01 Apr 2025 08:05	W	Ice	2	X												
58	0020_SW035_250331	31 Mar 2025 10:20	W	Ice	2	X												
59	0020_SW036_250331	31 Mar 2025 10:00	W	Ice	2	X												
60	0020_SW037_250331	31 Mar 2025 09:45	W	Ice	2	X												
61	0020_SW0E7_250331	31 Mar 2025 09:45	W	Ice	2	X												EXTRA SAMPLE FOR LAB QC
62	0020_QC330_250331	31/03/2025	W	Ice	2	X												
63	0020_QC350_250331	31/03/2025	W	Ice	2	X												
64	0020_QC340_250401	1/04/2025	W	Ice	2	X												
65	0020_QC506_250331	31/03/2025	W	Ice	2	X												
66	0020_QC501_250401	1/04/2025	W	Ice	2							X						
67	0020_QC504_250331	31/03/2025	W	Ice	4	X												

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Sydney
Unit F3 - 6 Building F, 16 Mars Road, Lane Cove
Phone: +612 9900 8400
Email: enviro.syd@mgtlabmark.com.au

Brisbane
Unit 1-21 Smallwood Place, Murarrie
Phone: +617 3902 4600
Email: enviro.bris@mgtlabmark.com.au

Melbourne
2 Kingston Town Close, Oakleigh, VIC 3166
Phone: +613 8564 5000 Fax: +613 8564 5090
Email: enquiries.melb@mgtlabmark.com.au

CHAIN OF CUSTODY RECORD

CLIENT DETAILS

Page 1 of 1

Company Name : RMS Pty Ltd	Contact Name : Jarrad Meadley, 0411 379 401	Purchase Order :	COC Number :
Office Address :	Project Manager : Kevin Milne / Adam Sapp	PROJECT Number : 12609822	Eurofins | mgt quote ID :
Level 18, 123 Pitt Street, Sydney NSW 2000	Email for results : jarrad.meadley@rms.com; kevin.milne@rms.com; phillipsreports@rms.com	PROJECT Name : ACT_0020_PFASOMP_25	Data output format: ESDAT

Special Directions & Comments :

Forwarded from ALS

Eurofins | mgt DI water batch number:

Analytes

Some common holding times (with correct preservation).
For further information contact the lab

Waters		Soils	
BTEX, MAH, VOC	14 days	BTEX, MAH, VOC	14 days
TRH, PAH, Phenols, Pesticides	7 days	TRH, PAH, Phenols, Pesticides	14 days
Heavy Metals	6 months	Heavy Metals	6 months
Mercury, CrVI	28 days	Mercury, CrVI	28 days
Microbiological testing	24 hours	Microbiological testing	72 hours
BOD, Nitrate, Nitrite, Total N	2 days	Anions	28 days
Solids - TSS, TDS etc	7 days	SPOCAS, pH Field and FOX, CrS	24 hours
Ferrous Iron	7 days	ASLP, TCLP	7 days

	Sample ID	Date	Matrix	PFAS Extended Suite - 36 PFAS	PFAS Extended Suite - 40 PFAS - Upper Limits	Containers: 500P	250P	60P	1LA	40mL vial	250mL A	Jar	Bag	Sample comments:
1	0020_QC200_250331	31 Mar 2025 09:45	W	X										2x Containers
2	0020_QC201_250331	31 Mar 2025 12:00	S	X										1x Container
3	0020_QC230_250331	31 Mar 2025 09:51	W	X										2x Containers
4	0020_QC231_250331	31 Mar 2025 11:48	W	X										1x Container
5	0020_QC232_250331	31 Mar 2025 13:15	S	X										2x Containers
6	0020_QC233_250331	31 Mar 2025 13:15	W	X										2x Containers
7	0020_QC237_250403	03 Apr 2025 09:26	W	X										2x Containers
8	0020_QC238_250403	03 Apr 2025 09:49	W	X										2x Containers
9	0020_QC250_250401	01 Apr 2025 08:31	W	X										2x Containers
10	0020_QC251_250401	01 Apr 2025 08:47	W	X										2x Containers
11	0020_QC252_250401	01 Apr 2025 08:31	S	X										1x Container
12	0020_QC253_250401	01 Apr 2025 08:47	S	X										1x Container

Relinquished By: Andrew Duval (SMS)

Date & Time : 5/4/2025

Signature: A.Duval

Turn around time:

1 DAY ☐ 2 DAY ☐ 3 DAY ☐

5 DAY ☑ 10 DAY ☐ Other:

Method Of Shipment

☐ Courier
☐ Hand Delivered
☐ Postal

Courier Consignment # :

Temperature on arrival:

Report Number:

SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order	: **ES2510618**		
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	: 12626622	Page	: 1 of 4
Order number	: 12626622	Quote number	: ES2023GHDSER0026 (ES23GHDSER0026)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: ----		
Sampler	: Jarrad Mawbey		

Dates

Date Samples Received	: 08-Apr-2025 14:20	Issue Date	: 11-Apr-2025
Client Requested Due Date	: 17-Apr-2025	Scheduled Reporting Date	: **17-Apr-2025**

Delivery Details

Mode of Delivery	: Undefined	Security Seal	: Not Available
No. of coolers/boxes	: 7	Temperature	: 5.1, 5.0, 3.2°C - Ice present
Receipt Detail	:	No. of samples received / analysed	: 67 / 67

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
- Samples QC200, QC201, QC230, QC231, QC232, QC233, QC237, QC238, QC250, QC251, QC252 and QC253 have been forwarded to Eurofins.
- **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)	SOIL - EP231X-SD PFAS - Full Suite (30 analytes) in Sediments
ES2510618-020	31-Mar-2025 12:00	0020_QC101_250331	✓		✓
ES2510618-023	31-Mar-2025 13:15	0020_QC132_250331	✓		✓
ES2510618-028	31-Mar-2025 10:55	0020_QC151_250331	✓		✓
ES2510618-030	01-Apr-2025 08:47	0020_SD001_250401	✓		✓
ES2510618-031	01-Apr-2025 08:31	0020_SD002_250401	✓		✓
ES2510618-032	31-Mar-2025 10:55	0020_SD004_250331	✓		✓
ES2510618-033	31-Mar-2025 16:06	0020_SD006_250331	✓		✓
ES2510618-034	01-Apr-2025 09:05	0020_SD007_250401	✓		✓
ES2510618-035	31-Mar-2025 11:30	0020_SD018_250331	✓		✓
ES2510618-036	31-Mar-2025 11:00	0020_SD019_250331	✓		✓
ES2510618-037	31-Mar-2025 09:00	0020_SD024_250331	✓		✓
ES2510618-038	02-Apr-2025 14:08	0020_SD025_250402	✓		✓
ES2510618-039	31-Mar-2025 12:00	0020_SD026_250331	✓		✓
ES2510618-040	31-Mar-2025 12:04	0020_SD028_250331	✓		✓
ES2510618-041	31-Mar-2025 13:15	0020_SD032_250331	✓		✓
ES2510618-042	31-Mar-2025 13:26	0020_SD033_250331	✓		✓
ES2510618-067	07-Apr-2025 00:00	0020_QC504_250331		✓	

Matrix: **WATER**

Laboratory sample ID	Sampling date / time	Sample ID	WATER - EP231X PFAS - Full Suite (31 analytes)
ES2510618-001	07-Apr-2025 08:33	0020_MW001_250407	✓
ES2510618-002	07-Apr-2025 08:54	0020_MW007_250407	✓
ES2510618-003	08-Apr-2025 08:00	0020_MW012_250408	✓
ES2510618-004	31-Mar-2025 09:39	0020_MW017_250331	✓
ES2510618-005	31-Mar-2025 11:48	0020_MW037_250331	✓
ES2510618-006	31-Mar-2025 13:41	0020_MW052_250331	✓

			WATER - EP231X PFAS - Full Suite (31 analytes)
ES2510618-007	31-Mar-2025 15:30	0020_MW057_250331	✓
ES2510618-008	03-Apr-2025 08:26	0020_MW058_250403	✓
ES2510618-009	31-Mar-2025 16:29	0020_MW059_250331	✓
ES2510618-010	01-Apr-2025 10:14	0020_MW068_250401	✓
ES2510618-011	31-Mar-2025 15:33	0020_MW102D_250331	✓
ES2510618-012	31-Mar-2025 15:24	0020_MW102S_250331	✓
ES2510618-013	03-Apr-2025 09:49	0020_MW104_250403	✓
ES2510618-014	31-Mar-2025 08:38	0020_MW109_250331	✓
ES2510618-015	31-Mar-2025 01:43	0020_MW110_250331	✓
ES2510618-016	03-Apr-2025 08:45	0020_MW111_250403	✓
ES2510618-017	31-Mar-2025 09:51	0020_MW112_250331	✓
ES2510618-018	31-Mar-2025 11:04	0020_MW115_250331	✓
ES2510618-019	31-Mar-2025 09:45	0020_QC100_250331	✓
ES2510618-021	31-Mar-2025 09:51	0020_QC130_250331	✓
ES2510618-022	31-Mar-2025 11:48	0020_QC131_250331	✓
ES2510618-024	31-Mar-2025 13:15	0020_QC133_250331	✓
ES2510618-025	03-Apr-2025 08:26	0020_QC137_250403	✓
ES2510618-026	03-Apr-2025 09:49	0020_QC138_250403	✓
ES2510618-027	31-Mar-2025 12:04	0020_QC150_250331	✓
ES2510618-029	31-Mar-2025 16:06	0020_QC152_250331	✓
ES2510618-043	31-Mar-2025 11:30	0020_SW004_250331	✓
ES2510618-044	31-Mar-2025 11:00	0020_SW005_250331	✓
ES2510618-045	31-Mar-2025 09:00	0020_SW010_250331	✓
ES2510618-046	02-Apr-2025 14:08	0020_SW011_250402	✓
ES2510618-047	31-Mar-2025 12:00	0020_SW012_250331	✓
ES2510618-048	31-Mar-2025 11:52	0020_SW016_250331	✓
ES2510618-049	31-Mar-2025 12:04	0020_SW018_250331	✓
ES2510618-050	31-Mar-2025 13:15	0020_SW022_250331	✓
ES2510618-051	31-Mar-2025 13:26	0020_SW023_250331	✓
ES2510618-052	01-Apr-2025 08:47	0020_SW026_250401	✓
ES2510618-053	01-Apr-2025 08:31	0020_SW027_250401	✓
ES2510618-054	31-Mar-2025 10:55	0020_SW029_250331	✓
ES2510618-055	31-Mar-2025 16:24	0020_SW030_250331	✓
ES2510618-056	31-Mar-2025 16:06	0020_SW032_250331	✓
ES2510618-057	01-Apr-2025 09:05	0020_SW033_250401	✓
ES2510618-058	31-Mar-2025 10:20	0020_SW035_250331	✓
ES2510618-059	31-Mar-2025 10:00	0020_SW036_250331	✓
ES2510618-060	31-Mar-2025 09:45	0020_SW037_250331	✓
ES2510618-061	31-Mar-2025 09:45	0020_SW057_250331	✓
ES2510618-062	07-Apr-2025 00:00	0020_QC330_250331	✓
ES2510618-063	07-Apr-2025 00:00	0020_QC350_2503331	✓

			WATER - EP231X PFAS - Full Suite (31 analytes)
ES2510618-064	07-Apr-2025 00:00	0020_QC380_250401	✓
ES2510618-065	07-Apr-2025 00:00	0020_QC500_250331	✓
ES2510618-066	07-Apr-2025 00:00	0020_QC501_250401	✓

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

CERTIFICATE OF ANALYSIS

Work Order	: **ES2510618**	Page	: 1 of 33
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	: 12626622	Date Samples Received	: 08-Apr-2025 14:20
Order number	: 12626622	Date Analysis Commenced	: 14-Apr-2025
C-O-C number	: ----	Issue Date	: 22-Apr-2025 15:02
Sampler	: Jarrad Mawbey		
Site	: ----		
Quote number	: ES23GHDSER0026		
No. of samples received	: 67		
No. of samples analysed	: 67		

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*
Ankit Joshi	Senior Chemist - Inorganics	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: Insufficient sample has been provided for duplicate sample.
- 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: SEDIMENT (Matrix: SOIL)				Sample ID	0020_QC101_250331	0020_QC132_250331	0020_QC151_250331	0020_SD001_250401	0020_SD002_250401
				Sampling date / time	31-Mar-2025 12:00	31-Mar-2025 13:15	31-Mar-2025 10:55	01-Apr-2025 08:47	01-Apr-2025 08:31
Compound	CAS Number	LOR	Unit		ES2510618-020	ES2510618-023	ES2510618-028	ES2510618-030	ES2510618-031
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	0.1	%		**18.4**	**53.3**	**25.8**	**25.4**	**34.2**
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	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		<0.0002	**0.0064**	<0.0002	<0.0002	**0.0017**
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg		<0.0002	**0.0007**	<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
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	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
Perfluoropentanoic acid (PFPeA)	2706-90-3	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
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
Perfluorododecanoic acid (PFDoDA)	307-55-1	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
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg		<0.001	<0.001	<0.001	<0.001	<0.001
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg		<0.0002	**0.0006**	<0.0002	<0.0002	<0.0002

Analytical Results

Sub-Matrix: SEDIMENT (Matrix: SOIL)				Sample ID	0020_QC101_250331	0020_QC132_250331	0020_QC151_250331	0020_SD001_250401	0020_SD002_250401
				Sampling date / time	31-Mar-2025 12:00	31-Mar-2025 13:15	31-Mar-2025 10:55	01-Apr-2025 08:47	01-Apr-2025 08:31
Compound	CAS Number	LOR	Unit		ES2510618-020	ES2510618-023	ES2510618-028	ES2510618-030	ES2510618-031
					Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	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-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	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-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
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
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
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
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 PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg		<0.0002	**0.0071**	<0.0002	<0.0002	**0.0019**
Sum of PFAS (WA DER List)	----	0.0002	mg/kg		<0.0002	**0.0071**	<0.0002	<0.0002	**0.0019**
Sum of PFAS	----	0.0002	mg/kg		<0.0002	**0.0077**	<0.0002	<0.0002	**0.0019**
EP231S: PFAS Surrogate									
13C8-PFOA	----	0.0002	%		**102**	**103**	**109**	**99.4**	**99.0**
13C4-PFOS	----	0.0002	%		**93.6**	**96.4**	**98.2**	**94.2**	**98.0**

Analytical Results

Sub-Matrix: SEDIMENT (Matrix: SOIL)			Sample ID	0020_SD004_250331	0020_SD006_250331	0020_SD007_250401	0020_SD018_250331	0020_SD019_250331
			Sampling date / time	31-Mar-2025 10:55	31-Mar-2025 16:06	01-Apr-2025 09:05	31-Mar-2025 11:30	31-Mar-2025 11:00
Compound	CAS Number	LOR	Unit	ES2510618-032	ES2510618-033	ES2510618-034	ES2510618-035	ES2510618-036
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	0.1	%	**26.7**	**24.3**	**23.7**	**20.3**	**27.4**
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	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	<0.0002	**0.0006**	<0.0002	**0.0002**	**0.0012**
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
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	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
Perfluoropentanoic acid (PFPeA)	2706-90-3	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
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
Perfluorododecanoic acid (PFDoDA)	307-55-1	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
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	<0.001	<0.001	<0.001
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: SEDIMENT (Matrix: SOIL)				Sample ID	0020_SD004_250331	0020_SD006_250331	0020_SD007_250401	0020_SD018_250331	0020_SD019_250331
				Sampling date / time	31-Mar-2025 10:55	31-Mar-2025 16:06	01-Apr-2025 09:05	31-Mar-2025 11:30	31-Mar-2025 11:00
Compound	CAS Number	LOR	Unit		ES2510618-032	ES2510618-033	ES2510618-034	ES2510618-035	ES2510618-036
					Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	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-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	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-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
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
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
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
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 PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg		<0.0002	**0.0006**	<0.0002	**0.0002**	**0.0012**
Sum of PFAS (WA DER List)	----	0.0002	mg/kg		<0.0002	**0.0006**	<0.0002	**0.0002**	**0.0012**
Sum of PFAS	----	0.0002	mg/kg		<0.0002	**0.0006**	<0.0002	**0.0002**	**0.0012**
EP231S: PFAS Surrogate									
13C8-PFOA	----	0.0002	%		**98.6**	**98.4**	**109**	**101**	**104**
13C4-PFOS	----	0.0002	%		**92.0**	**89.2**	**92.7**	**91.3**	**95.9**

Analytical Results

Sub-Matrix: SEDIMENT (Matrix: SOIL)			Sample ID	0020_SD024_250331	0020_SD025_250402	0020_SD026_250331	0020_SD028_250331	0020_SD032_250331
			Sampling date / time	31-Mar-2025 09:00	02-Apr-2025 14:08	31-Mar-2025 12:00	31-Mar-2025 12:04	31-Mar-2025 13:15
Compound	CAS Number	LOR	Unit	ES2510618-037	ES2510618-038	ES2510618-039	ES2510618-040	ES2510618-041
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	0.1	%	**22.4**	**80.0**	**18.4**	**27.9**	**62.1**
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	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	**0.0008**	**0.0202**	<0.0002	**0.0010**	**0.0103**
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	**0.0076**	<0.0002	<0.0002	**0.0010**
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	**0.0002**	<0.0002	<0.0002	<0.0002
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	**0.0007**	<0.0002	<0.0002	<0.0002
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	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
Perfluoropentanoic acid (PFPeA)	2706-90-3	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
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
Perfluorododecanoic acid (PFDoDA)	307-55-1	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
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	<0.001	<0.001	<0.001
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	**0.0006**

Analytical Results

Sub-Matrix: SEDIMENT (Matrix: SOIL)				Sample ID	0020_SD024_250331	0020_SD025_250402	0020_SD026_250331	0020_SD028_250331	0020_SD032_250331
				Sampling date / time	31-Mar-2025 09:00	02-Apr-2025 14:08	31-Mar-2025 12:00	31-Mar-2025 12:04	31-Mar-2025 13:15
Compound	CAS Number	LOR	Unit		ES2510618-037	ES2510618-038	ES2510618-039	ES2510618-040	ES2510618-041
					Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	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-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	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-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
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
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
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
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 PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg		**0.0008**	**0.0278**	<0.0002	**0.0010**	**0.0113**
Sum of PFAS (WA DER List)	----	0.0002	mg/kg		**0.0008**	**0.0278**	<0.0002	**0.0010**	**0.0113**
Sum of PFAS	----	0.0002	mg/kg		**0.0008**	**0.0293**	<0.0002	**0.0010**	**0.0119**
EP231S: PFAS Surrogate									
13C8-PFOA	----	0.0002	%		**107**	**106**	**105**	**94.8**	**97.2**
13C4-PFOS	----	0.0002	%		**95.2**	**101**	**102**	**86.2**	**99.2**

Analytical Results

Sub-Matrix: SEDIMENT (Matrix: SOIL)				Sample ID	0020_SD033_250331	----	----	----	----
				Sampling date / time	31-Mar-2025 13:26	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2510618-042	--------	--------	--------	--------
					Result	----	----	----	----
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	0.1	%		**59.8**	----	----	----	----
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg		**0.0108**	----	----	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg		**0.0015**	----	----	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg		**0.0005**	----	----	----	----
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg		<0.0002	----	----	----	----
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg		**0.0002**	----	----	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg		**0.0003**	----	----	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg		<0.0005	----	----	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg		**0.0016**	----	----	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg		**0.0003**	----	----	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg		**0.0002**	----	----	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg		<0.001	----	----	----	----
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg		**0.0010**	----	----	----	----

Analytical Results

Sub-Matrix: SEDIMENT (Matrix: SOIL)				Sample ID	0020_SD033_250331	----	----	----	----
				Sampling date / time	31-Mar-2025 13:26	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2510618-042	--------	--------	--------	--------
					Result	----	----	----	----
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg		<0.0005	----	----	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg		<0.0002	----	----	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg		<0.0005	----	----	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg		<0.0005	----	----	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg		<0.0002	----	----	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg		<0.0005	----	----	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg		<0.0005	----	----	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg		<0.0005	----	----	----	----
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg		<0.0005	----	----	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg		<0.0005	----	----	----	----
EP231P: PFAS Sums									
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg		**0.0123**	----	----	----	----
Sum of PFAS (WA DER List)	----	0.0002	mg/kg		**0.0144**	----	----	----	----
Sum of PFAS	----	0.0002	mg/kg		**0.0164**	----	----	----	----
EP231S: PFAS Surrogate									
13C8-PFOA	----	0.0002	%		**99.6**	----	----	----	----
13C4-PFOS	----	0.0002	%		**88.6**	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	0020_QC504_250331	----	----	----	----
				Sampling date / time	07-Apr-2025 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2510618-067	--------	--------	--------	--------
					Result	----	----	----	----
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg		<0.0002	----	----	----	----
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg		<0.001	----	----	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg		<0.0005	----	----	----	----
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg		<0.0002	----	----	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg		<0.0005	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	0020_QC504_250331	----	----	----	----
				Sampling date / time	07-Apr-2025 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2510618-067	--------	--------	--------	--------
					Result	----	----	----	----
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg		<0.0005	----	----	----	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg		<0.0005	----	----	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg		<0.0005	----	----	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg		<0.0002	----	----	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg		<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	----	----	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg		<0.0005	----	----	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg		<0.0005	----	----	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg		<0.0005	----	----	----	----
EP231P: PFAS Sums									
Sum of PFAS	----	0.0002	mg/kg		<0.0002	----	----	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg		<0.0002	----	----	----	----
Sum of PFAS (WA DER List)	----	0.0002	mg/kg		<0.0002	----	----	----	----
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		**99.0**	----	----	----	----
13C8-PFOA	----	0.0002	%		**106**	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0020_MW001_250407	0020_MW007_250407	0020_MW012_250408	0020_MW017_250331	0020_MW037_250331
				Sampling date / time	07-Apr-2025 08:33	07-Apr-2025 08:54	08-Apr-2025 08:00	31-Mar-2025 09:39	31-Mar-2025 11:48
Compound	CAS Number	LOR	Unit		ES2510618-001	ES2510618-002	ES2510618-003	ES2510618-004	ES2510618-005
					Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		<0.02	**0.04**	**0.03**	<0.02	**0.90**
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		<0.02	<0.02	**0.06**	<0.02	**0.73**
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		<0.01	**0.14**	**1.16**	**0.27**	**5.16**
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		<0.02	<0.02	**0.06**	**0.02**	**0.35**
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		<0.01	**0.10**	**3.41**	**0.98**	**2.51**
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	**0.4**
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	**1.21**
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		<0.02	<0.02	**0.10**	**0.03**	**2.09**
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		<0.02	<0.02	**0.02**	<0.02	**0.32**
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		<0.01	<0.01	**0.05**	**0.01**	**0.44**
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_250407	0020_MW007_250407	0020_MW012_250408	0020_MW017_250331	0020_MW037_250331
				Sampling date / time	07-Apr-2025 08:33	07-Apr-2025 08:54	08-Apr-2025 08:00	31-Mar-2025 09:39	31-Mar-2025 11:48
Compound	CAS Number	LOR	Unit		ES2510618-001	ES2510618-002	ES2510618-003	ES2510618-004	ES2510618-005
					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	**3.58**
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	**0.28**	**4.89**	**1.31**	**18.1**
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		<0.01	**0.24**	**4.57**	**1.25**	**7.67**
Sum of PFAS (WA DER List)	----	0.01	µg/L		<0.01	**0.28**	**4.77**	**1.29**	**16.6**
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**101**	**100**	**96.1**	**101**	**98.8**
13C8-PFOA	----	0.02	%		**95.6**	**93.4**	**97.7**	**91.8**	**92.8**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0020_MW052_250331	0020_MW057_250331	0020_MW058_250403	0020_MW059_250331	0020_MW068_250401
				Sampling date / time	31-Mar-2025 13:41	31-Mar-2025 15:30	03-Apr-2025 08:26	31-Mar-2025 16:29	01-Apr-2025 10:14
Compound	CAS Number	LOR	Unit		ES2510618-006	ES2510618-007	ES2510618-008	ES2510618-009	ES2510618-010
					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**	**0.44**	**0.57**	**0.53**	**0.14**
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		**0.02**	**0.54**	**2.49**	**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	**0.05**	<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_MW052_250331	0020_MW057_250331	0020_MW058_250403	0020_MW059_250331	0020_MW068_250401
				Sampling date / time	31-Mar-2025 13:41	31-Mar-2025 15:30	03-Apr-2025 08:26	31-Mar-2025 16:29	01-Apr-2025 10:14
Compound	CAS Number	LOR	Unit		ES2510618-006	ES2510618-007	ES2510618-008	ES2510618-009	ES2510618-010
					Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
EP231P: PFAS Sums									
Sum of PFAS	----	0.01	µg/L		**0.04**	**1.00**	**3.17**	**1.01**	**0.14**
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		**0.04**	**0.98**	**3.06**	**0.97**	**0.14**
Sum of PFAS (WA DER List)	----	0.01	µg/L		**0.04**	**0.98**	**3.13**	**0.99**	**0.14**
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**99.2**	**96.9**	**98.7**	**100**	**99.1**
13C8-PFOA	----	0.02	%		**94.4**	**92.1**	**90.7**	**91.2**	**91.4**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0020_MW102D_250331	0020_MW102S_250331	0020_MW104_250403	0020_MW109_250331	0020_MW110_250331
				Sampling date / time	31-Mar-2025 15:33	31-Mar-2025 15:24	03-Apr-2025 09:49	31-Mar-2025 08:38	31-Mar-2025 01:43
Compound	CAS Number	LOR	Unit		ES2510618-011	ES2510618-012	ES2510618-013	ES2510618-014	ES2510618-015
					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	**0.04**
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		**0.02**	<0.02	<0.02	**0.02**	**0.04**
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		**0.23**	**0.05**	<0.01	**0.39**	**1.02**
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		<0.02	<0.02	<0.02	**0.07**	**0.12**
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		**0.12**	**0.04**	<0.01	**1.20**	**3.95**
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	**0.04**	**0.10**
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		<0.02	<0.02	<0.02	**0.12**	**0.06**
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	**0.03**
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		<0.01	<0.01	<0.01	**0.03**	**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_250331	0020_MW102S_250331	0020_MW104_250403	0020_MW109_250331	0020_MW110_250331
				Sampling date / time	31-Mar-2025 15:33	31-Mar-2025 15:24	03-Apr-2025 09:49	31-Mar-2025 08:38	31-Mar-2025 01:43
Compound	CAS Number	LOR	Unit		ES2510618-011	ES2510618-012	ES2510618-013	ES2510618-014	ES2510618-015
					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		**0.39**	**0.09**	<0.01	**1.87**	**5.43**
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		**0.35**	**0.09**	<0.01	**1.59**	**4.97**
Sum of PFAS (WA DER List)	----	0.01	µg/L		**0.37**	**0.09**	<0.01	**1.78**	**5.27**
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**89.9**	**94.5**	**91.8**	**99.7**	**95.9**
13C8-PFOA	----	0.02	%		**91.6**	**91.7**	**97.2**	**94.7**	**90.7**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0020_MW111_250403	0020_MW112_250331	0020_MW115_250331	0020_QC100_250331	0020_QC130_250331
				Sampling date / time	03-Apr-2025 08:45	31-Mar-2025 09:51	31-Mar-2025 11:04	31-Mar-2025 09:45	31-Mar-2025 09:51
Compound	CAS Number	LOR	Unit		ES2510618-016	ES2510618-017	ES2510618-018	ES2510618-019	ES2510618-021
					Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		**0.09**	**0.06**	<0.02	<0.02	**0.05**
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		**0.13**	**0.05**	<0.02	<0.02	**0.04**
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		**1.94**	**0.47**	**0.11**	**0.05**	**0.41**
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		**0.07**	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		**18.6**	**0.14**	**0.93**	**0.09**	**0.07**
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		**0.2**	<0.1	<0.1	<0.1	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		**0.70**	**0.04**	<0.02	<0.02	**0.04**
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		**0.49**	**0.10**	<0.02	<0.02	**0.09**
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		**0.24**	**0.04**	<0.02	<0.02	**0.03**
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		**0.14**	**0.05**	<0.01	<0.01	**0.04**
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L		**0.06**	<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_MW111_250403	0020_MW112_250331	0020_MW115_250331	0020_QC100_250331	0020_QC130_250331
				Sampling date / time	03-Apr-2025 08:45	31-Mar-2025 09:51	31-Mar-2025 11:04	31-Mar-2025 09:45	31-Mar-2025 09:51
Compound	CAS Number	LOR	Unit		ES2510618-016	ES2510618-017	ES2510618-018	ES2510618-019	ES2510618-021
					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		**0.26**	<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		**23.1**	**0.95**	**1.04**	**0.14**	**0.77**
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		**20.5**	**0.61**	**1.04**	**0.14**	**0.48**
Sum of PFAS (WA DER List)	----	0.01	µg/L		**22.7**	**0.90**	**1.04**	**0.14**	**0.73**
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**91.6**	**94.3**	**99.5**	**93.9**	**94.7**
13C8-PFOA	----	0.02	%		**93.2**	**94.1**	**92.7**	**90.4**	**99.7**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0020_QC131_250331	0020_QC133_250331	0020_QC137_250403	0020_QC138_250403	0020_QC150_250331
				Sampling date / time	31-Mar-2025 11:48	31-Mar-2025 13:15	03-Apr-2025 08:26	03-Apr-2025 09:49	31-Mar-2025 12:04
Compound	CAS Number	LOR	Unit		ES2510618-022	ES2510618-024	ES2510618-025	ES2510618-026	ES2510618-027
					Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		**0.86**	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		**0.84**	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		**5.67**	**0.11**	**0.57**	<0.01	**0.16**
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		**0.39**	<0.02	**0.03**	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		**2.24**	**0.19**	**2.56**	<0.01	**0.34**
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		**0.4**	<0.1	<0.1	<0.1	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		**1.17**	<0.02	<0.02	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		**1.83**	**0.03**	**0.02**	<0.02	**0.03**
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		**0.31**	<0.02	<0.02	<0.02	<0.02
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		**0.45**	<0.01	**0.05**	<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_QC131_250331	0020_QC133_250331	0020_QC137_250403	0020_QC138_250403	0020_QC150_250331
				Sampling date / time	31-Mar-2025 11:48	31-Mar-2025 13:15	03-Apr-2025 08:26	03-Apr-2025 09:49	31-Mar-2025 12:04
Compound	CAS Number	LOR	Unit		ES2510618-022	ES2510618-024	ES2510618-025	ES2510618-026	ES2510618-027
					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		**3.87**	<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		**18.4**	**0.33**	**3.23**	<0.01	**0.54**
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		**7.91**	**0.30**	**3.13**	<0.01	**0.50**
Sum of PFAS (WA DER List)	----	0.01	µg/L		**16.8**	**0.33**	**3.20**	<0.01	**0.54**
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**91.6**	**96.9**	**98.6**	**94.2**	**102**
13C8-PFOA	----	0.02	%		**100**	**99.9**	**99.5**	**97.0**	**104**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0020_QC152_250331	0020_SW004_250331	0020_SW005_250331	0020_SW010_250331	0020_SW011_250402
				Sampling date / time	31-Mar-2025 16:06	31-Mar-2025 11:30	31-Mar-2025 11:00	31-Mar-2025 09:00	02-Apr-2025 14:08
Compound	CAS Number	LOR	Unit		ES2510618-029	ES2510618-043	ES2510618-044	ES2510618-045	ES2510618-046
					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	**0.02**	**0.02**	**0.06**	**0.14**
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	**0.02**	**0.03**	**0.10**	**0.10**
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L		<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		<0.02	<0.02	<0.02	<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	0020_QC152_250331	0020_SW004_250331	0020_SW005_250331	0020_SW010_250331	0020_SW011_250402
				Sampling date / time	31-Mar-2025 16:06	31-Mar-2025 11:30	31-Mar-2025 11:00	31-Mar-2025 09:00	02-Apr-2025 14:08
Compound	CAS Number	LOR	Unit		ES2510618-029	ES2510618-043	ES2510618-044	ES2510618-045	ES2510618-046
					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	**0.04**	**0.05**	**0.16**	**0.24**
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		<0.01	**0.04**	**0.05**	**0.16**	**0.24**
Sum of PFAS (WA DER List)	----	0.01	µg/L		<0.01	**0.04**	**0.05**	**0.16**	**0.24**
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**94.3**	**95.2**	**98.8**	**92.0**	**93.6**
13C8-PFOA	----	0.02	%		**97.9**	**95.7**	**104**	**102**	**98.1**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0020_SW012_250331	0020_SW016_250331	0020_SW018_250331	0020_SW022_250331	0020_SW023_250331
				Sampling date / time	31-Mar-2025 12:00	31-Mar-2025 11:52	31-Mar-2025 12:04	31-Mar-2025 13:15	31-Mar-2025 13:26
Compound	CAS Number	LOR	Unit		ES2510618-047	ES2510618-048	ES2510618-049	ES2510618-050	ES2510618-051
					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**	**0.15**	**0.15**	**0.11**	**0.10**
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		**0.03**	**0.60**	**0.27**	**0.18**	**0.20**
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	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	**0.03**
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		<0.02	**0.03**	**0.03**	**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	0020_SW012_250331	0020_SW016_250331	0020_SW018_250331	0020_SW022_250331	0020_SW023_250331
				Sampling date / time	31-Mar-2025 12:00	31-Mar-2025 11:52	31-Mar-2025 12:04	31-Mar-2025 13:15	31-Mar-2025 13:26
Compound	CAS Number	LOR	Unit		ES2510618-047	ES2510618-048	ES2510618-049	ES2510618-050	ES2510618-051
					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	**0.08**
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		**0.05**	**0.78**	**0.45**	**0.31**	**0.44**
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		**0.05**	**0.75**	**0.42**	**0.29**	**0.30**
Sum of PFAS (WA DER List)	----	0.01	µg/L		**0.05**	**0.78**	**0.45**	**0.31**	**0.44**
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**96.5**	**94.6**	**97.5**	**96.2**	**98.0**
13C8-PFOA	----	0.02	%		**102**	**97.7**	**99.1**	**98.5**	**103**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0020_SW026_250401	0020_SW027_250401	0020_SW029_250331	0020_SW030_250331	0020_SW032_250331
				Sampling date / time	01-Apr-2025 08:47	01-Apr-2025 08:31	31-Mar-2025 10:55	31-Mar-2025 16:24	31-Mar-2025 16:06
Compound	CAS Number	LOR	Unit		ES2510618-052	ES2510618-053	ES2510618-054	ES2510618-055	ES2510618-056
					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	**0.04**	**0.04**	**0.12**	<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	**0.04**	**0.04**	**0.07**	<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	0020_SW026_250401	0020_SW027_250401	0020_SW029_250331	0020_SW030_250331	0020_SW032_250331
				Sampling date / time	01-Apr-2025 08:47	01-Apr-2025 08:31	31-Mar-2025 10:55	31-Mar-2025 16:24	31-Mar-2025 16:06
Compound	CAS Number	LOR	Unit		ES2510618-052	ES2510618-053	ES2510618-054	ES2510618-055	ES2510618-056
					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	**0.08**	**0.08**	**0.19**	<0.01
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		<0.01	**0.08**	**0.08**	**0.19**	<0.01
Sum of PFAS (WA DER List)	----	0.01	µg/L		<0.01	**0.08**	**0.08**	**0.19**	<0.01
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**102**	**95.5**	**98.4**	**95.6**	**94.2**
13C8-PFOA	----	0.02	%		**98.0**	**99.6**	**99.6**	**98.8**	**105**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0020_SW033_250401	0020_SW035_250331	0020_SW036_250331	0020_SW037_250331	0020_SW057_250331
				Sampling date / time	01-Apr-2025 09:05	31-Mar-2025 10:20	31-Mar-2025 10:00	31-Mar-2025 09:45	31-Mar-2025 09:45
Compound	CAS Number	LOR	Unit		ES2510618-057	ES2510618-058	ES2510618-059	ES2510618-060	ES2510618-061
					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	**0.29**	**0.20**	**0.18**	**0.04**
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	**0.42**	**0.10**	**0.31**	**0.08**
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	<0.02
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	0020_SW033_250401	0020_SW035_250331	0020_SW036_250331	0020_SW037_250331	0020_SW057_250331
				Sampling date / time	01-Apr-2025 09:05	31-Mar-2025 10:20	31-Mar-2025 10:00	31-Mar-2025 09:45	31-Mar-2025 09:45
Compound	CAS Number	LOR	Unit		ES2510618-057	ES2510618-058	ES2510618-059	ES2510618-060	ES2510618-061
					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	**0.77**	**0.32**	**0.49**	**0.12**
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		<0.01	**0.71**	**0.30**	**0.49**	**0.12**
Sum of PFAS (WA DER List)	----	0.01	µg/L		<0.01	**0.75**	**0.32**	**0.49**	**0.12**
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**102**	**96.8**	**89.3**	**96.5**	**95.1**
13C8-PFOA	----	0.02	%		**104**	**99.7**	**108**	**100**	**102**

Analytical Results

Sub-Matrix: WATER
(Matrix: WATER)

Compound	CAS Number	LOR	Unit	Sample ID	0020_QC330_250331	0020_QC350_250333 1	0020_QC380_250401	0020_QC500_250331	0020_QC501_250401
				Sampling date / time	07-Apr-2025 00:00	07-Apr-2025 00:00	07-Apr-2025 00:00	07-Apr-2025 00:00	07-Apr-2025 00:00
					ES2510618-062	ES2510618-063	ES2510618-064	ES2510618-065	ES2510618-066
					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	0020_QC330_250331	0020_QC350_2503331	0020_QC380_250401	0020_QC500_250331	0020_QC501_250401
				Sampling date / time	07-Apr-2025 00:00	07-Apr-2025 00:00	07-Apr-2025 00:00	07-Apr-2025 00:00	07-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2510618-062	ES2510618-063	ES2510618-064	ES2510618-065	ES2510618-066
					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	%		**98.8**	**92.6**	**101**	**94.0**	**95.7**
13C8-PFOA	----	0.02	%		**106**	**101**	**105**	**103**	**102**

Surrogate Control Limits

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

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	: **ES2510618**	Page	: 1 of 12
Client	: **GHD PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MS HELEN MILNE	Telephone	: +61-2-8784 8555
Project	: 12626622	Date Samples Received	: 08-Apr-2025
Site	: ----	Issue Date	: 22-Apr-2025
Sampler	: Jarrad Mawbey	No. of samples received	: 67
Order number	: 12626622	No. of samples analysed	: 67

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	ES2510538--001	Anonymous	**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	ES2510618--003	0020_MW012_250408	**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	ES2510618--003	0020_MW012_250408	**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: **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	57	8.77	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*

Matrix: **SOIL**

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
EA055: Moisture Content (Dried @ 105-110°C)							
HDPE Soil Jar (EA055) 0020_SD001_250401, 0020_SD002_250401, 0020_SD007_250401	**01-Apr-2025**	**----**	----	----	**14-Apr-2025**	15-Apr-2025	✓
HDPE Soil Jar (EA055) 0020_SD025_250402	**02-Apr-2025**	**----**	----	----	**14-Apr-2025**	16-Apr-2025	✓
HDPE Soil Jar (EA055) 0020_QC101_250331, 0020_QC132_250331, 0020_QC151_250331, 0020_SD004_250331, 0020_SD006_250331, 0020_SD018_250331, 0020_SD019_250331, 0020_SD024_250331, 0020_SD026_250331, 0020_SD028_250331, 0020_SD032_250331, 0020_SD033_250331	**31-Mar-2025**	**----**	----	----	**14-Apr-2025**	14-Apr-2025	✓
EP231A: Perfluoroalkyl Sulfonic Acids							
HDPE Soil Jar (EP231X-SD) 0020_SD001_250401, 0020_SD002_250401, 0020_SD007_250401	**01-Apr-2025**	**14-Apr-2025**	28-Sep-2025	✓	**16-Apr-2025**	24-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0020_SD025_250402	**02-Apr-2025**	**15-Apr-2025**	29-Sep-2025	✓	**22-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X) 0020_QC504_250331	**07-Apr-2025**	**14-Apr-2025**	04-Oct-2025	✓	**16-Apr-2025**	24-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0020_QC101_250331, 0020_QC132_250331, 0020_QC151_250331, 0020_SD004_250331, 0020_SD006_250331, 0020_SD018_250331, 0020_SD019_250331, 0020_SD024_250331	**31-Mar-2025**	**14-Apr-2025**	27-Sep-2025	✓	**16-Apr-2025**	24-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0020_SD026_250331, 0020_SD028_250331, 0020_SD032_250331, 0020_SD033_250331	**31-Mar-2025**	**15-Apr-2025**	27-Sep-2025	✓	**22-Apr-2025**	25-May-2025	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE Soil Jar (EP231X-SD) 0020_SD001_250401, 0020_SD002_250401, 0020_SD007_250401	**01-Apr-2025**	**14-Apr-2025**	28-Sep-2025	✓	**16-Apr-2025**	24-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0020_SD025_250402	**02-Apr-2025**	**15-Apr-2025**	29-Sep-2025	✓	**22-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X) 0020_QC504_250331	**07-Apr-2025**	**14-Apr-2025**	04-Oct-2025	✓	**16-Apr-2025**	24-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0020_QC101_250331, 0020_QC132_250331, 0020_QC151_250331, 0020_SD004_250331, 0020_SD006_250331, 0020_SD018_250331, 0020_SD019_250331, 0020_SD024_250331	**31-Mar-2025**	**14-Apr-2025**	27-Sep-2025	✓	**16-Apr-2025**	24-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0020_SD026_250331, 0020_SD028_250331, 0020_SD032_250331, 0020_SD033_250331	**31-Mar-2025**	**15-Apr-2025**	27-Sep-2025	✓	**22-Apr-2025**	25-May-2025	✓
EP231C: Perfluoroalkyl Sulfonamides							
HDPE Soil Jar (EP231X-SD) 0020_SD001_250401, 0020_SD002_250401, 0020_SD007_250401	**01-Apr-2025**	**14-Apr-2025**	28-Sep-2025	✓	**16-Apr-2025**	24-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0020_SD025_250402	**02-Apr-2025**	**15-Apr-2025**	29-Sep-2025	✓	**22-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X) 0020_QC504_250331	**07-Apr-2025**	**14-Apr-2025**	04-Oct-2025	✓	**16-Apr-2025**	24-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0020_QC101_250331, 0020_QC132_250331, 0020_QC151_250331, 0020_SD004_250331, 0020_SD006_250331, 0020_SD018_250331, 0020_SD019_250331, 0020_SD024_250331	**31-Mar-2025**	**14-Apr-2025**	27-Sep-2025	✓	**16-Apr-2025**	24-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0020_SD026_250331, 0020_SD028_250331, 0020_SD032_250331, 0020_SD033_250331	**31-Mar-2025**	**15-Apr-2025**	27-Sep-2025	✓	**22-Apr-2025**	25-May-2025	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE Soil Jar (EP231X-SD) 0020_SD001_250401, 0020_SD002_250401, 0020_SD007_250401	**01-Apr-2025**	**14-Apr-2025**	28-Sep-2025	✓	**16-Apr-2025**	24-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0020_SD025_250402	**02-Apr-2025**	**15-Apr-2025**	29-Sep-2025	✓	**22-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X) 0020_QC504_250331	**07-Apr-2025**	**14-Apr-2025**	04-Oct-2025	✓	**16-Apr-2025**	24-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0020_QC101_250331, 0020_QC132_250331, 0020_QC151_250331, 0020_SD004_250331, 0020_SD006_250331, 0020_SD018_250331, 0020_SD019_250331, 0020_SD024_250331	**31-Mar-2025**	**14-Apr-2025**	27-Sep-2025	✓	**16-Apr-2025**	24-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0020_SD026_250331, 0020_SD028_250331, 0020_SD032_250331, 0020_SD033_250331	**31-Mar-2025**	**15-Apr-2025**	27-Sep-2025	✓	**22-Apr-2025**	25-May-2025	✓
EP231P: PFAS Sums							
HDPE Soil Jar (EP231X-SD) 0020_SD001_250401, 0020_SD002_250401, 0020_SD007_250401	**01-Apr-2025**	**14-Apr-2025**	28-Sep-2025	✓	**16-Apr-2025**	24-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0020_SD025_250402	**02-Apr-2025**	**15-Apr-2025**	29-Sep-2025	✓	**22-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X) 0020_QC504_250331	**07-Apr-2025**	**14-Apr-2025**	04-Oct-2025	✓	**16-Apr-2025**	24-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0020_QC101_250331, 0020_QC132_250331, 0020_QC151_250331, 0020_SD004_250331, 0020_SD006_250331, 0020_SD018_250331, 0020_SD019_250331, 0020_SD024_250331	**31-Mar-2025**	**14-Apr-2025**	27-Sep-2025	✓	**16-Apr-2025**	24-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0020_SD026_250331, 0020_SD028_250331, 0020_SD032_250331, 0020_SD033_250331	**31-Mar-2025**	**15-Apr-2025**	27-Sep-2025	✓	**22-Apr-2025**	25-May-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 / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231A: Perfluoroalkyl Sulfonic Acids							
HDPE (no PTFE) (EP231X) 0020_MW068_250401	**01-Apr-2025**	**14-Apr-2025**	28-Sep-2025	✓	**15-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0020_SW026_250401, 0020_SW027_250401	**01-Apr-2025**	**14-Apr-2025**	28-Sep-2025	✓	**16-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0020_SW033_250401	**01-Apr-2025**	**15-Apr-2025**	28-Sep-2025	✓	**17-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0020_SW011_250402	**02-Apr-2025**	**14-Apr-2025**	29-Sep-2025	✓	**16-Apr-2025**	29-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0020_MW058_250403, 0020_MW104_250403, 0020_MW111_250403	**03-Apr-2025**	**14-Apr-2025**	30-Sep-2025	✓	**15-Apr-2025**	30-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0020_QC137_250403, 0020_QC138_250403	**03-Apr-2025**	**14-Apr-2025**	30-Sep-2025	✓	**16-Apr-2025**	30-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0020_MW001_250407, 0020_MW007_250407	**07-Apr-2025**	**14-Apr-2025**	04-Oct-2025	✓	**15-Apr-2025**	04-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0020_QC330_250331, 0020_QC350_2503331, 0020_QC380_250401, 0020_QC500_250331, 0020_QC501_250401	**07-Apr-2025**	**15-Apr-2025**	04-Oct-2025	✓	**17-Apr-2025**	04-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0020_MW012_250408	**08-Apr-2025**	**14-Apr-2025**	05-Oct-2025	✓	**15-Apr-2025**	05-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0020_MW017_250331, 0020_MW037_250331, 0020_MW052_250331, 0020_MW057_250331, 0020_MW059_250331, 0020_MW102D_250331, 0020_MW102S_250331, 0020_MW109_250331, 0020_MW110_250331, 0020_MW112_250331, 0020_MW115_250331, 0020_QC100_250331	**31-Mar-2025**	**14-Apr-2025**	27-Sep-2025	✓	**15-Apr-2025**	27-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0020_QC130_250331, 0020_QC131_250331, 0020_QC133_250331, 0020_QC150_250331, 0020_QC152_250331, 0020_SW004_250331, 0020_SW005_250331, 0020_SW010_250331, 0020_SW012_250331, 0020_SW016_250331, 0020_SW018_250331, 0020_SW022_250331, 0020_SW023_250331, 0020_SW029_250331	**31-Mar-2025**	**14-Apr-2025**	27-Sep-2025	✓	**16-Apr-2025**	27-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0020_SW030_250331, 0020_SW032_250331, 0020_SW035_250331, 0020_SW036_250331, 0020_SW037_250331, 0020_SW057_250331	**31-Mar-2025**	**15-Apr-2025**	27-Sep-2025	✓	**17-Apr-2025**	27-Sep-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
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE (no PTFE) (EP231X) 0020_MW068_250401	**01-Apr-2025**	**14-Apr-2025**	28-Sep-2025	✓	**15-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0020_SW026_250401, 0020_SW027_250401	**01-Apr-2025**	**14-Apr-2025**	28-Sep-2025	✓	**16-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0020_SW033_250401	**01-Apr-2025**	**15-Apr-2025**	28-Sep-2025	✓	**17-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0020_SW011_250402	**02-Apr-2025**	**14-Apr-2025**	29-Sep-2025	✓	**16-Apr-2025**	29-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0020_MW058_250403, 0020_MW104_250403, 0020_MW111_250403	**03-Apr-2025**	**14-Apr-2025**	30-Sep-2025	✓	**15-Apr-2025**	30-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0020_QC137_250403, 0020_QC138_250403	**03-Apr-2025**	**14-Apr-2025**	30-Sep-2025	✓	**16-Apr-2025**	30-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0020_MW001_250407, 0020_MW007_250407	**07-Apr-2025**	**14-Apr-2025**	04-Oct-2025	✓	**15-Apr-2025**	04-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0020_QC330_250331, 0020_QC350_2503331, 0020_QC380_250401, 0020_QC500_250331, 0020_QC501_250401	**07-Apr-2025**	**15-Apr-2025**	04-Oct-2025	✓	**17-Apr-2025**	04-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0020_MW012_250408	**08-Apr-2025**	**14-Apr-2025**	05-Oct-2025	✓	**15-Apr-2025**	05-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0020_MW017_250331, 0020_MW037_250331, 0020_MW052_250331, 0020_MW057_250331, 0020_MW059_250331, 0020_MW102D_250331, 0020_MW102S_250331, 0020_MW109_250331, 0020_MW110_250331, 0020_MW112_250331, 0020_MW115_250331, 0020_QC100_250331	**31-Mar-2025**	**14-Apr-2025**	27-Sep-2025	✓	**15-Apr-2025**	27-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0020_QC130_250331, 0020_QC131_250331, 0020_QC133_250331, 0020_QC150_250331, 0020_QC152_250331, 0020_SW004_250331, 0020_SW005_250331, 0020_SW010_250331, 0020_SW012_250331, 0020_SW016_250331, 0020_SW018_250331, 0020_SW022_250331, 0020_SW023_250331, 0020_SW029_250331	**31-Mar-2025**	**14-Apr-2025**	27-Sep-2025	✓	**16-Apr-2025**	27-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0020_SW030_250331, 0020_SW032_250331, 0020_SW035_250331, 0020_SW036_250331, 0020_SW037_250331, 0020_SW057_250331	**31-Mar-2025**	**15-Apr-2025**	27-Sep-2025	✓	**17-Apr-2025**	27-Sep-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
EP231C: Perfluoroalkyl Sulfonamides							
HDPE (no PTFE) (EP231X) 0020_MW068_250401	**01-Apr-2025**	**14-Apr-2025**	28-Sep-2025	✓	**15-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0020_SW026_250401, 0020_SW027_250401	**01-Apr-2025**	**14-Apr-2025**	28-Sep-2025	✓	**16-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0020_SW033_250401	**01-Apr-2025**	**15-Apr-2025**	28-Sep-2025	✓	**17-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0020_SW011_250402	**02-Apr-2025**	**14-Apr-2025**	29-Sep-2025	✓	**16-Apr-2025**	29-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0020_MW058_250403, 0020_MW104_250403, 0020_MW111_250403	**03-Apr-2025**	**14-Apr-2025**	30-Sep-2025	✓	**15-Apr-2025**	30-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0020_QC137_250403, 0020_QC138_250403	**03-Apr-2025**	**14-Apr-2025**	30-Sep-2025	✓	**16-Apr-2025**	30-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0020_MW001_250407, 0020_MW007_250407	**07-Apr-2025**	**14-Apr-2025**	04-Oct-2025	✓	**15-Apr-2025**	04-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0020_QC330_250331, 0020_QC350_2503331, 0020_QC380_250401, 0020_QC500_250331, 0020_QC501_250401	**07-Apr-2025**	**15-Apr-2025**	04-Oct-2025	✓	**17-Apr-2025**	04-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0020_MW012_250408	**08-Apr-2025**	**14-Apr-2025**	05-Oct-2025	✓	**15-Apr-2025**	05-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0020_MW017_250331, 0020_MW037_250331, 0020_MW052_250331, 0020_MW057_250331, 0020_MW059_250331, 0020_MW102D_250331, 0020_MW102S_250331, 0020_MW109_250331, 0020_MW110_250331, 0020_MW112_250331, 0020_MW115_250331, 0020_QC100_250331	**31-Mar-2025**	**14-Apr-2025**	27-Sep-2025	✓	**15-Apr-2025**	27-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0020_QC130_250331, 0020_QC131_250331, 0020_QC133_250331, 0020_QC150_250331, 0020_QC152_250331, 0020_SW004_250331, 0020_SW005_250331, 0020_SW010_250331, 0020_SW012_250331, 0020_SW016_250331, 0020_SW018_250331, 0020_SW022_250331, 0020_SW023_250331, 0020_SW029_250331	**31-Mar-2025**	**14-Apr-2025**	27-Sep-2025	✓	**16-Apr-2025**	27-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0020_SW030_250331, 0020_SW032_250331, 0020_SW035_250331, 0020_SW036_250331, 0020_SW037_250331, 0020_SW057_250331	**31-Mar-2025**	**15-Apr-2025**	27-Sep-2025	✓	**17-Apr-2025**	27-Sep-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
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE (no PTFE) (EP231X) 0020_MW068_250401	**01-Apr-2025**	**14-Apr-2025**	28-Sep-2025	✓	**15-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0020_SW026_250401, 0020_SW027_250401	**01-Apr-2025**	**14-Apr-2025**	28-Sep-2025	✓	**16-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0020_SW033_250401	**01-Apr-2025**	**15-Apr-2025**	28-Sep-2025	✓	**17-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0020_SW011_250402	**02-Apr-2025**	**14-Apr-2025**	29-Sep-2025	✓	**16-Apr-2025**	29-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0020_MW058_250403, 0020_MW104_250403, 0020_MW111_250403	**03-Apr-2025**	**14-Apr-2025**	30-Sep-2025	✓	**15-Apr-2025**	30-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0020_QC137_250403, 0020_QC138_250403	**03-Apr-2025**	**14-Apr-2025**	30-Sep-2025	✓	**16-Apr-2025**	30-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0020_MW001_250407, 0020_MW007_250407	**07-Apr-2025**	**14-Apr-2025**	04-Oct-2025	✓	**15-Apr-2025**	04-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0020_QC330_250331, 0020_QC350_2503331, 0020_QC380_250401, 0020_QC500_250331, 0020_QC501_250401	**07-Apr-2025**	**15-Apr-2025**	04-Oct-2025	✓	**17-Apr-2025**	04-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0020_MW012_250408	**08-Apr-2025**	**14-Apr-2025**	05-Oct-2025	✓	**15-Apr-2025**	05-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0020_MW017_250331, 0020_MW037_250331, 0020_MW052_250331, 0020_MW057_250331, 0020_MW059_250331, 0020_MW102D_250331, 0020_MW102S_250331, 0020_MW109_250331, 0020_MW110_250331, 0020_MW112_250331, 0020_MW115_250331, 0020_QC100_250331	**31-Mar-2025**	**14-Apr-2025**	27-Sep-2025	✓	**15-Apr-2025**	27-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0020_QC130_250331, 0020_QC131_250331, 0020_QC133_250331, 0020_QC150_250331, 0020_QC152_250331, 0020_SW004_250331, 0020_SW005_250331, 0020_SW010_250331, 0020_SW012_250331, 0020_SW016_250331, 0020_SW018_250331, 0020_SW022_250331, 0020_SW023_250331, 0020_SW029_250331	**31-Mar-2025**	**14-Apr-2025**	27-Sep-2025	✓	**16-Apr-2025**	27-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0020_SW030_250331, 0020_SW032_250331, 0020_SW035_250331, 0020_SW036_250331, 0020_SW037_250331, 0020_SW057_250331	**31-Mar-2025**	**15-Apr-2025**	27-Sep-2025	✓	**17-Apr-2025**	27-Sep-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
EP231P: PFAS Sums							
HDPE (no PTFE) (EP231X) 0020_MW068_250401	**01-Apr-2025**	**14-Apr-2025**	28-Sep-2025	✓	**15-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0020_SW026_250401, 0020_SW027_250401	**01-Apr-2025**	**14-Apr-2025**	28-Sep-2025	✓	**16-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0020_SW033_250401	**01-Apr-2025**	**15-Apr-2025**	28-Sep-2025	✓	**17-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0020_SW011_250402	**02-Apr-2025**	**14-Apr-2025**	29-Sep-2025	✓	**16-Apr-2025**	29-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0020_MW058_250403, 0020_MW104_250403, 0020_MW111_250403	**03-Apr-2025**	**14-Apr-2025**	30-Sep-2025	✓	**15-Apr-2025**	30-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0020_QC137_250403, 0020_QC138_250403	**03-Apr-2025**	**14-Apr-2025**	30-Sep-2025	✓	**16-Apr-2025**	30-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0020_MW001_250407, 0020_MW007_250407	**07-Apr-2025**	**14-Apr-2025**	04-Oct-2025	✓	**15-Apr-2025**	04-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0020_QC330_250331, 0020_QC350_2503331, 0020_QC380_250401, 0020_QC500_250331, 0020_QC501_250401	**07-Apr-2025**	**15-Apr-2025**	04-Oct-2025	✓	**17-Apr-2025**	04-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0020_MW012_250408	**08-Apr-2025**	**14-Apr-2025**	05-Oct-2025	✓	**15-Apr-2025**	05-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0020_MW017_250331, 0020_MW037_250331, 0020_MW052_250331, 0020_MW057_250331, 0020_MW059_250331, 0020_MW102D_250331, 0020_MW102S_250331, 0020_MW109_250331, 0020_MW110_250331, 0020_MW112_250331, 0020_MW115_250331, 0020_QC100_250331	**31-Mar-2025**	**14-Apr-2025**	27-Sep-2025	✓	**15-Apr-2025**	27-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0020_QC130_250331, 0020_QC131_250331, 0020_QC133_250331, 0020_QC150_250331, 0020_QC152_250331, 0020_SW004_250331, 0020_SW005_250331, 0020_SW010_250331, 0020_SW012_250331, 0020_SW016_250331, 0020_SW018_250331, 0020_SW022_250331, 0020_SW023_250331, 0020_SW029_250331	**31-Mar-2025**	**14-Apr-2025**	27-Sep-2025	✓	**16-Apr-2025**	27-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0020_SW030_250331, 0020_SW032_250331, 0020_SW035_250331, 0020_SW036_250331, 0020_SW037_250331, 0020_SW057_250331	**31-Mar-2025**	**15-Apr-2025**	27-Sep-2025	✓	**17-Apr-2025**	27-Sep-2025	✓

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	16	**12.50**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	10	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-SD	4	37	**10.81**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	10	**10.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-SD	2	37	**5.41**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	10	**10.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-SD	2	37	**5.41**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	10	**10.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-SD	2	37	**5.41**	**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	57	**8.77**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	3	57	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	3	57	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	3	57	**5.26**	**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-SD	SOIL	In-house: Analysis of sediments 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	: **ES2510618**	Page	: 1 of 27
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	: 12626622	Date Samples Received	: 08-Apr-2025
Order number	: 12626622	Date Analysis Commenced	: 14-Apr-2025
C-O-C number	: ----	Issue Date	: 22-Apr-2025
Sampler	: Jarrad Mawbey		
Site	: ----		
Quote number	: ES23GHDSER0026		
No. of samples received	: 67		
No. of samples analysed	: 67		

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*
Ankit Joshi	Senior Chemist - Inorganics	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**

				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: 6509106)									
ES2510618-020	0020_QC101_250331	EA055: Moisture Content	----	0.1	%	18.4	18.7	1.4	0% - 20%
ES2510618-035	0020_SD018_250331	EA055: Moisture Content	----	0.1	%	20.3	20.5	0.8	0% - 20%
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 6508423)									
ES2510618-038	0020_SD025_250402	EP231X-SD: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	0.0202	0.0200	0.7	0% - 20%
		EP231X-SD: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	0.0076	0.0081	6.4	0% - 20%
		EP231X-SD: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	0.0007	0.0007	0.0	No Limit
		EP231X-SD: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
ES2510622-006	Anonymous	EP231X-SD: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	0.0005	0.0005	0.0	No Limit
		EP231X-SD: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	0.150	0.140	7.4	0% - 20%
		EP231X-SD: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	0.0229	0.0225	1.5	0% - 20%

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report					
				LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 6508423) - continued									
ES2510622-006	Anonymous	EP231X-SD: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	0.0014	0.0016	17.4	No Limit
		EP231X-SD: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	0.0093	0.0092	1.2	0% - 20%
		EP231X-SD: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	0.0006	0.0006	0.0	No Limit
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 6508442)									
ES2510538-001	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	0.0014	0.0021	38.5	0% - 50%
		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	0.0083	0.0100	17.9	0% - 20%
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 6508447)									
ES2510113-070	Anonymous	EP231X-SD: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	0.0005	0.0004	0.0	No Limit
		EP231X-SD: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
ES2510618-031	0020_SD002_250401	EP231X-SD: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	0.0017	0.0016	0.0	No Limit
		EP231X-SD: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 6508423)									
ES2510618-038	0020_SD025_250402	EP231X-SD: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	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: 6508423) - continued									
ES2510618-038	0020_SD025_250402	EP231X-SD: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
ES2510622-006	Anonymous	EP231X-SD: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	0.0003	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	0.0016	0.0018	14.6	No Limit
		EP231X-SD: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	0.0008	0.0008	0.0	No Limit
		EP231X-SD: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	0.0004	0.0003	0.0	No Limit
		EP231X-SD: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	0.0028	0.0025	11.1	0% - 50%
		EP231X-SD: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	0.0006	0.0005	25.2	No Limit
		EP231X-SD: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	0.0003	0.0	No Limit
		EP231X-SD: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005 (0.0006)*	mg/kg	<0.0006	<0.0006	0.0	No Limit
		EP231X-SD: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 6508442)									
ES2510538-001	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	0.0005	82.8	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	0.0003	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
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 6508447)									
ES2510113-070	Anonymous	EP231X-SD: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	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: 6508447) - continued									
ES2510113-070	Anonymous	EP231X-SD: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
ES2510618-031	0020_SD002_250401	EP231X-SD: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 6508423)									
ES2510618-038	0020_SD025_250402	EP231X-SD: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
ES2510622-006	Anonymous	EP231X-SD: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	0.0011	0.0011	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: 6508423) - continued									
ES2510622-006	Anonymous	EP231X-SD: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005 (0.0006)*	mg/kg	<0.0006	<0.0006	0.0	No Limit
		EP231X-SD: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005 (0.0006)*	mg/kg	<0.0006	<0.0006	0.0	No Limit
		EP231X-SD: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005 (0.0006)*	mg/kg	<0.0006	<0.0006	0.0	No Limit
		EP231X-SD: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005 (0.0006)*	mg/kg	<0.0006	<0.0006	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 6508442)									
ES2510538-001	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
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 6508447)									
ES2510113-070	Anonymous	EP231X-SD: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report					
				LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 6508447) - continued									
ES2510618-031	0020_SD002_250401	EP231X-SD: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 6508423)									
ES2510618-038	0020_SD025_250402	EP231X-SD: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
ES2510622-006	Anonymous	EP231X-SD: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 6508442)									
ES2510538-001	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
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 6508447)									

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report					
				LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 6508447) - continued									
ES2510113-070	Anonymous	EP231X-SD: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
ES2510618-031	0020_SD002_250401	EP231X-SD: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 6508423)									
ES2510618-038	0020_SD025_250402	EP231X-SD: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	0.0278	0.0281	1.1	0% - 20%
		EP231X-SD: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	0.0278	0.0281	1.1	0% - 20%
		EP231X-SD: Sum of PFAS	----	0.0002	mg/kg	0.0293	0.0294	0.3	0% - 20%
ES2510622-006	Anonymous	EP231X-SD: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	0.173	0.162	6.2	0% - 20%
		EP231X-SD: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	0.179	0.169	6.1	0% - 20%
		EP231X-SD: Sum of PFAS	----	0.0002	mg/kg	0.194	0.184	5.5	0% - 20%
EP231P: PFAS Sums (QC Lot: 6508447)									
ES2510113-070	Anonymous	EP231X-SD: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	0.0005	0.0004	22.2	No Limit
		EP231X-SD: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	0.0005	0.0004	22.2	No Limit
		EP231X-SD: Sum of PFAS	----	0.0002	mg/kg	0.0005	0.0004	22.2	No Limit
ES2510618-031	0020_SD002_250401	EP231X-SD: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	0.0019	0.0016	17.1	No Limit
		EP231X-SD: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	0.0019	0.0016	17.1	No Limit
		EP231X-SD: Sum of PFAS	----	0.0002	mg/kg	0.0019	0.0016	17.1	No Limit

Sub-Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report					
				LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 6508428)									
ES2510618-002	0020_MW007_250407	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	0.14	0.14	0.0	0% - 50%
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	0.10	0.11	0.0	0% - 50%

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: 6508428) - continued									
ES2510618-002	0020_MW007_250407	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	0.04	0.04	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
ES2510618-011	0020_MW102D_250331	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	0.23	0.22	5.7	0% - 20%
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	0.12	0.12	0.0	0% - 50%
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	0.02	0.03	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	<0.02	<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: 6508432)									
ES2510618-049	0020_SW018_250331	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	0.15	0.15	0.0	0% - 50%
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	0.27	0.24	13.4	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: 6510731)									
ES2510618-061	0020_SW057_250331	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	0.04	0.04	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	0.08	0.08	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
ES2510622-050	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: 6508428)									
ES2510618-002	0020_MW007_250407	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

Sub-Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report					
				LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 6508428) - continued									
ES2510618-002	0020_MW007_250407	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
ES2510618-011	0020_MW102D_250331	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 6508432)									
ES2510618-049	0020_SW018_250331	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	0.03	0.03	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 6510731)									
ES2510618-061	0020_SW057_250331	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

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: 6510731) - continued									
ES2510618-061	0020_SW057_250331	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
ES2510622-050	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: 6508428)									
ES2510618-002	0020_MW007_250407	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
ES2510618-011	0020_MW102D_250331	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: 6508428) - continued									
ES2510618-011	0020_MW102D_250331	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: 6508432)									
ES2510618-049	0020_SW018_250331	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: 6510731)									
ES2510618-061	0020_SW057_250331	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
ES2510622-050	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: 6510731) - continued									
ES2510622-050	Anonymous	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: 6508428)									
ES2510618-002	0020_MW007_250407	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
ES2510618-011	0020_MW102D_250331	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: 6508432)									
ES2510618-049	0020_SW018_250331	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: 6510731)									
ES2510618-061	0020_SW057_250331	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
ES2510622-050	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

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: 6510731) - continued									
ES2510622-050	Anonymous	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: 6508428)									
ES2510618-002	0020_MW007_250407	EP231X: Sum of PFAS	----	0.01	µg/L	0.28	0.29	3.5	0% - 20%
ES2510618-011	0020_MW102D_250331	EP231X: Sum of PFAS	----	0.01	µg/L	0.39	0.40	2.5	0% - 20%
EP231P: PFAS Sums (QC Lot: 6508432)									
ES2510618-049	0020_SW018_250331	EP231X: Sum of PFAS	----	0.01	µg/L	0.45	0.42	6.9	0% - 20%
EP231P: PFAS Sums (QC Lot: 6510731)									
ES2510618-061	0020_SW057_250331	EP231X: Sum of PFAS	----	0.01	µg/L	0.12	0.12	0.0	0% - 50%
ES2510622-050	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit

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

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

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6508423)								
EP231X-SD: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	80.8	73.0	123
EP231X-SD: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	83.7	68.0	136
EP231X-SD: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	83.7	67.0	130
EP231X-SD: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	90.0	70.0	132
EP231X-SD: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	88.6	59.0	134
EP231X-SD: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	0.00125 mg/kg	81.9	72.0	128
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6508442)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	0.00125 mg/kg	86.4	72.0	128
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	102	73.0	123
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	88.6	67.0	130
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	99.4	70.0	132
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	103	68.0	136
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	109	59.0	134
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6508447)								
EP231X-SD: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	90.0	73.0	123
EP231X-SD: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	88.2	68.0	136
EP231X-SD: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	82.0	67.0	130
EP231X-SD: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	97.4	70.0	132
EP231X-SD: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	107	59.0	134
EP231X-SD: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	0.00125 mg/kg	83.2	72.0	128
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6508423)								
EP231X-SD: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	87.0	64.0	136
EP231X-SD: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	80.6	66.0	139
EP231X-SD: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	101	69.0	133
EP231X-SD: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	92.5	69.0	132
EP231X-SD: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	88.0	69.0	133
EP231X-SD: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	90.2	72.0	129
EP231X-SD: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	80.4	70.0	132
EP231X-SD: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	91.5	71.0	131
EP231X-SD: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	91.4	69.0	135

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6508423) - continued								
EP231X-SD: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	0.00125 mg/kg	90.5	69.0	133
EP231X-SD: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	0.00625 mg/kg	85.5	71.0	135
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6508442)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	0.00625 mg/kg	100.0	71.0	135
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	103	69.0	132
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	85.4	70.0	132
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	86.0	71.0	131
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	115	69.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	95.6	72.0	129
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	0.00125 mg/kg	92.6	69.0	133
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	108	64.0	136
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	115	69.0	135
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	98.0	66.0	139
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	113	69.0	133
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6508447)								
EP231X-SD: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	86.9	64.0	136
EP231X-SD: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	95.8	66.0	139
EP231X-SD: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	96.6	69.0	133
EP231X-SD: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	93.6	69.0	132
EP231X-SD: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	93.0	69.0	133
EP231X-SD: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	92.9	72.0	129
EP231X-SD: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	83.8	70.0	132
EP231X-SD: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	86.6	71.0	131
EP231X-SD: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	102	69.0	135
EP231X-SD: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	0.00125 mg/kg	92.8	69.0	133
EP231X-SD: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	0.00625 mg/kg	88.0	71.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6508423)								
EP231X-SD: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	94.3	67.0	137
EP231X-SD: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	101	68.7	130
EP231X-SD: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	89.7	63.0	144
EP231X-SD: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	0.00312 mg/kg	107	71.6	129

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6508423) - continued								
EP231X-SD: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	100	65.1	134
EP231X-SD: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	89.6	61.0	139
EP231X-SD: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	97.8	69.8	131
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6508442)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	107	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	111	69.8	131
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	109	68.7	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	114	65.1	134
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	92.5	63.0	144
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	84.4	61.0	139
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6508447)								
EP231X-SD: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	90.5	67.0	137
EP231X-SD: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	101	68.7	130
EP231X-SD: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	95.5	63.0	144
EP231X-SD: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	0.00312 mg/kg	107	71.6	129
EP231X-SD: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	102	65.1	134
EP231X-SD: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	89.4	61.0	139
EP231X-SD: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	98.3	69.8	131
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6508423)								
EP231X-SD: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	0.00125 mg/kg	97.6	65.0	137
EP231X-SD: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	0.00125 mg/kg	92.4	64.0	140
EP231X-SD: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	0.00125 mg/kg	81.8	62.0	145
EP231X-SD: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	0.00125 mg/kg	97.1	69.2	143
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6508442)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	0.00125 mg/kg	87.1	62.0	145

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6508442) - continued								
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	0.00125 mg/kg	102	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	115	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	120	69.2	143
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6508447)								
EP231X-SD: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	0.00125 mg/kg	87.9	65.0	137
EP231X-SD: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	0.00125 mg/kg	88.0	64.0	140
EP231X-SD: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	0.00125 mg/kg	86.0	62.0	145
EP231X-SD: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	0.00125 mg/kg	97.2	69.2	143
EP231P: PFAS Sums (QCLot: 6508423)								
EP231X-SD: Sum of PFHxS and PFOS	355-46-4/17 63-23-1	0.0002	mg/kg	<0.0002	----	----	----	----
EP231X-SD: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<0.0002	----	----	----	----
EP231X-SD: Sum of PFAS	----	0.0002	mg/kg	<0.0002	----	----	----	----
EP231P: PFAS Sums (QCLot: 6508447)								
EP231X-SD: Sum of PFHxS and PFOS	355-46-4/17 63-23-1	0.0002	mg/kg	<0.0002	----	----	----	----
EP231X-SD: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<0.0002	----	----	----	----
EP231X-SD: Sum of PFAS	----	0.0002	mg/kg	<0.0002	----	----	----	----

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6508428)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.25 µg/L	95.1	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	97.0	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	97.2	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.25 µg/L	90.8	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.25 µg/L	97.0	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6508432)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.25 µg/L	97.9	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	94.4	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	109	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.25 µg/L	96.4	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.25 µg/L	78.3	53.0	142

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6510731)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.25 µg/L	77.9	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.25 µg/L	89.2	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.25 µg/L	93.9	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	93.6	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.25 µg/L	83.5	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.25 µg/L	81.5	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6508428)								
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	94.0	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	102	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	90.3	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	102	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	87.4	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	88.5	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	107	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	91.0	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	75.5	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	95.4	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6508432)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	97.1	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	100	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	97.1	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	93.9	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	100	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	100	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	100	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	96.1	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	105	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	85.2	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	91.4	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6510731)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	83.4	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	88.8	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	85.7	72.0	129

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6510731) - continued								
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	95.4	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	90.1	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	86.2	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	85.5	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	86.4	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	84.0	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	74.7	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	100	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6508428)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	110	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	99.6	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	102	62.6	147
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	87.1	66.0	145
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	104	57.6	145
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	84.8	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	93.2	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6508432)								
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	104	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	102	62.6	147
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	102	66.0	145
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	107	57.6	145
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	109	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: 6510731)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	94.3	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	99.3	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	89.0	62.6	147

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6510731) - continued								
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	81.2	66.0	145
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	90.4	57.6	145
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	89.4	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	79.4	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6508428)								
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	80.6	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	79.6	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	100	71.4	144
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6508432)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.25 µg/L	89.0	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.25 µg/L	126	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	93.3	71.4	144
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6510731)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.25 µg/L	94.5	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	92.5	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	133	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	97.9	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**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6508423)							
ES2510618-038	0020_SD025_250402	EP231X-SD: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.00125 mg/kg	74.8	73.0	123
		EP231X-SD: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.00125 mg/kg	118	68.0	136
		EP231X-SD: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.00125 mg/kg	97.0	67.0	130
		EP231X-SD: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.00125 mg/kg	92.2	70.0	132
		EP231X-SD: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.00125 mg/kg	87.7	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
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6508423) - continued							
ES2510618-038	0020_SD025_250402	EP231X-SD: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.00125 mg/kg	81.5	72.0	128
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6508442)							
ES2510538-001	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.00125 mg/kg	89.2	72.0	128
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.00125 mg/kg	97.2	73.0	123
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.00125 mg/kg	116	67.0	130
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.00125 mg/kg	98.2	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	106	59.0	134
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6508447)							
ES2510113-070	Anonymous	EP231X-SD: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.00125 mg/kg	88.2	73.0	123
		EP231X-SD: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.00125 mg/kg	74.2	68.0	136
		EP231X-SD: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.00125 mg/kg	80.9	67.0	130
		EP231X-SD: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.00125 mg/kg	80.7	70.0	132
		EP231X-SD: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.00125 mg/kg	81.5	59.0	134
		EP231X-SD: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.00125 mg/kg	85.2	72.0	128
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6508423)							
ES2510618-038	0020_SD025_250402	EP231X-SD: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.00125 mg/kg	80.4	64.0	136
		EP231X-SD: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.00125 mg/kg	88.8	66.0	139
		EP231X-SD: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.00312 mg/kg	99.2	69.0	133
		EP231X-SD: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.00125 mg/kg	90.5	69.0	132
		EP231X-SD: Perfluorooctanoic acid (PFOA)	335-67-1	0.00125 mg/kg	87.8	69.0	133
		EP231X-SD: Perfluorononanoic acid (PFNA)	375-95-1	0.00125 mg/kg	82.3	72.0	129
		EP231X-SD: Perfluorohexanoic acid (PFHxA)	307-24-4	0.00125 mg/kg	89.2	70.0	132
		EP231X-SD: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.00125 mg/kg	89.0	71.0	131
		EP231X-SD: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.00125 mg/kg	104	69.0	135
		EP231X-SD: Perfluorodecanoic acid (PFDA)	335-76-2	0.00125 mg/kg	84.4	69.0	133
		EP231X-SD: Perfluorobutanoic acid (PFBA)	375-22-4	0.00625 mg/kg	81.3	71.0	135
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6508442)							
ES2510538-001	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.00625 mg/kg	97.8	71.0	135
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.00125 mg/kg	98.3	69.0	132
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.00125 mg/kg	106	70.0	132
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.00125 mg/kg	86.4	71.0	131
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.00125 mg/kg	109	69.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.00125 mg/kg	92.8	72.0	129
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.00125 mg/kg	93.0	69.0	133
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.00125 mg/kg	108	64.0	136
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.00125 mg/kg	123	69.0	135

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: 6508442) - continued							
ES2510538-001	Anonymous	EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.00125 mg/kg	104	66.0	139
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.00312 mg/kg	118	69.0	133
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6508447)							
ES2510113-070	Anonymous	EP231X-SD: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.00125 mg/kg	78.8	64.0	136
		EP231X-SD: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.00125 mg/kg	79.1	66.0	139
		EP231X-SD: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.00312 mg/kg	97.3	69.0	133
		EP231X-SD: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.00125 mg/kg	85.0	69.0	132
		EP231X-SD: Perfluorooctanoic acid (PFOA)	335-67-1	0.00125 mg/kg	82.2	69.0	133
		EP231X-SD: Perfluorononanoic acid (PFNA)	375-95-1	0.00125 mg/kg	83.7	72.0	129
		EP231X-SD: Perfluorohexanoic acid (PFHxA)	307-24-4	0.00125 mg/kg	88.6	70.0	132
		EP231X-SD: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.00125 mg/kg	80.6	71.0	131
		EP231X-SD: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.00125 mg/kg	88.9	69.0	135
		EP231X-SD: Perfluorodecanoic acid (PFDA)	335-76-2	0.00125 mg/kg	83.0	69.0	133
		EP231X-SD: Perfluorobutanoic acid (PFBA)	375-22-4	0.00625 mg/kg	85.5	71.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6508423)							
ES2510618-038	0020_SD025_250402	EP231X-SD: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.00125 mg/kg	84.3	67.0	137
		EP231X-SD: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.00312 mg/kg	97.2	68.7	130
		EP231X-SD: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.00125 mg/kg	81.0	63.0	144
		EP231X-SD: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.00312 mg/kg	101	71.6	129
		EP231X-SD: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.00312 mg/kg	111	65.1	134
		EP231X-SD: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.00125 mg/kg	76.8	61.0	139
		EP231X-SD: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.00312 mg/kg	99.6	69.8	131
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6508442)							
ES2510538-001	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.00125 mg/kg	98.4	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.00312 mg/kg	110	71.6	129
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.00312 mg/kg	112	69.8	131
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.00312 mg/kg	106	68.7	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.00312 mg/kg	102	65.1	134
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.00125 mg/kg	86.0	63.0	144

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	Matrix Spike (MS) Report: SpikeRecovery(%) MS	Matrix Spike (MS) Report: Acceptable Limits (%) Low	Matrix Spike (MS) Report: Acceptable Limits (%) High
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6508442) - continued							
ES2510538-001	Anonymous	EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.00125 mg/kg	87.4	61.0	139
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6508447)							
ES2510113-070	Anonymous	EP231X-SD: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.00125 mg/kg	81.2	67.0	137
		EP231X-SD: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.00312 mg/kg	98.9	68.7	130
		EP231X-SD: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.00125 mg/kg	86.7	63.0	144
		EP231X-SD: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.00312 mg/kg	98.0	71.6	129
		EP231X-SD: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.00312 mg/kg	98.8	65.1	134
		EP231X-SD: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.00125 mg/kg	81.0	61.0	139
		EP231X-SD: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.00312 mg/kg	98.0	69.8	131
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6508423)							
ES2510618-038	0020_SD025_250402	EP231X-SD: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.00125 mg/kg	80.3	65.0	137
		EP231X-SD: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.00125 mg/kg	88.3	64.0	140
		EP231X-SD: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.00125 mg/kg	78.4	62.0	145
		EP231X-SD: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.00125 mg/kg	120	69.2	143
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6508442)							
ES2510538-001	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.00125 mg/kg	89.2	62.0	145
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.00125 mg/kg	100	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.00125 mg/kg	78.2	65.0	137
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.00125 mg/kg	108	69.2	143
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6508447)							
ES2510113-070	Anonymous	EP231X-SD: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.00125 mg/kg	96.5	65.0	137
		EP231X-SD: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.00125 mg/kg	81.4	64.0	140
		EP231X-SD: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.00125 mg/kg	84.9	62.0	145
		EP231X-SD: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.00125 mg/kg	85.2	69.2	143

Sub-Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	Matrix Spike (MS) Report: SpikeRecovery(%) MS	Matrix Spike (MS) Report: Acceptable Limits (%) Low	Matrix Spike (MS) Report: Acceptable Limits (%) High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6508428)							
ES2510618-003	0020_MW012_250408	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.25 µg/L	98.5	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.25 µg/L	104	71.0	127

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: 6508428) - continued							
ES2510618-003	0020_MW012_250408	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	89.2	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	88.9	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6508432)							
ES2510618-050	0020_SW022_250331	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.25 µg/L	89.1	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.25 µg/L	82.1	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.25 µg/L	112	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.25 µg/L	101	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.25 µg/L	122	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.25 µg/L	65.1	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6510731)							
ES2510622-050	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.25 µg/L	75.6	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.25 µg/L	83.8	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.25 µg/L	91.0	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.25 µg/L	93.5	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.25 µg/L	85.7	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.25 µg/L	75.4	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6508428)							
ES2510618-003	0020_MW012_250408	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	93.3	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	96.2	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	93.6	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	95.3	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	98.0	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	102	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	108	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	87.4	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	103	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6508432)							
ES2510618-050	0020_SW022_250331	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	85.1	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	99.7	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	95.6	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	91.1	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	94.3	71.0	133

Sub-Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%) MS	Acceptable Limits (%) Low	High
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6508432) - continued							
ES2510618-050	0020_SW022_250331	EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	87.1	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	84.0	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	73.6	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	92.6	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	74.7	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	76.4	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6510731)							
ES2510622-050	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	85.8	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	90.9	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	91.4	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	91.4	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	95.8	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	84.3	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	84.9	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	86.8	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	88.1	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	78.9	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	99.5	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6508428)							
ES2510618-003	0020_MW012_250408	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	97.7	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	97.5	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	92.7	62.6	147
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	98.7	66.0	145
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	108	57.6	145
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	98.7	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	90.9	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6508432)							
ES2510618-050	0020_SW022_250331	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	85.3	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	96.9	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	79.9	62.6	147
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	80.5	66.0	145

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: 6508432) - continued							
ES2510618-050	0020_SW022_250331	EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	89.4	57.6	145
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	92.8	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	79.8	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6510731)							
ES2510622-050	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	88.6	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	96.2	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	87.5	62.6	147
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	83.2	66.0	145
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	96.6	57.6	145
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	85.7	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	77.8	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6508428)							
ES2510618-003	0020_MW012_250408	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.25 µg/L	94.1	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.25 µg/L	92.4	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.25 µg/L	90.8	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.25 µg/L	108	71.4	144
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6508432)							
ES2510618-050	0020_SW022_250331	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.25 µg/L	80.3	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.25 µg/L	125	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.25 µg/L	83.6	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.25 µg/L	78.1	71.4	144
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6510731)							
ES2510622-050	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.25 µg/L	89.2	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.25 µg/L	83.2	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.25 µg/L	124	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.25 µg/L	112	71.4	144

CHAIN OF CUSTODY

ALS Laboratory

CLIENT:	TURNAROUND REQUIREMENT: ☐ Standard TAT (List due date):		
OFFICE:	(Standard TAT may be longer for some tests e.g. Ultra Trace Organics) ☐ Non-Standard or urgent TAT (List due date):		
PROJECT:	ALS QUOTE NO.:	COC SEQUENCE NUMBER (Circle)	
ORDER NUMBER:		CONTAINER NUMBER	
PROJECT MANAGER:	CONTACT PH:	OF	
SAMPLER:	SAMPLER MOBILE:		
COC emailed to ALS? (YES / NO)	EDD FORMAT (or default):		
Email Reports to:			

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
DATE/TIME:	DATE/TIME:	DATE/TIME:	DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite prices)
Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).

LAB ID	SAMPLE ID	Date and Time	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL CONTAINERS	EP231X (PFAS Full Suite)	PFAS - Short Trace Waters Long Suite (EP231B-SV)					HOLD		
1	0021_MW018_250402	02 Apr 2025 13:06	W	Ice	2	X								
2	0021_MW020_250402	02 Apr 2025 09:34	W	Ice	4	X								EXTRA SAMPLE FOR LAB QC
3	0021_MW021_250401	01 Apr 2025 16:22	W	Ice	2	X								EXTRA SAMPLE FOR LAB QC
4	0021_MW022_250401	01 Apr 2025 13:01	W	Ice	2	X								
5	0021_MW014_250401	01 Apr 2025 13:12	W	Ice	2	X								EXTRA SAMPLE FOR LAB QC
6	0021_MW025_250402	02 Apr 2025 11:03	W	Ice	2	X								
7	0021_MW026_250407	07 Apr 2025 13:25	W	Ice	2	X								
8	0021_MW028_250402	02 Apr 2025 14:12	W	Ice	2	X								
9	0021_MW029_250403	03 Apr 2025 08:34	W	Ice	4	X								EXTRA SAMPLE FOR LAB QC
10	0021_MW060_250401	01 Apr 2025 16:44	W	Ice	2	X								
11	0021_MW065_250403	03 Apr 2025 14:51	W	Ice	2	X								
12	0021_MW064_250403	03 Apr 2025 12:44	W	Ice	2	X								
13	0021_MW065_250403	03 Apr 2025 12:30	W	Ice	2	X								
14	0021_MW070_250407	07 Apr 2025 10:18	W	Ice	4	X								EXTRA SAMPLE FOR LAB QC
15	0021_MW071_250407	07 Apr 2025 11:34	W	Ice	2	X								
16	0021_MW072_250407	07 Apr 2025 10:42	W	Ice	2	X								
17	0021_MW101_250404	04 Apr 2025 08:59	W	Ice	4	X								EXTRA SAMPLE FOR LAB QC
18	0021_MW102_250404	04 Apr 2025 09:45	W	Ice	4	X								EXTRA SAMPLE FOR LAB QC
19	0021_MW103_250403	03 Apr 2025 14:09	W	Ice	2	X								
20	0021_MW104_250403	03 Apr 2025 13:52	W	Ice	2	X								
21	0021_MW105_250403	03 Apr 2025 12:01	W	Ice	2	X								EXTRA SAMPLE FOR LAB QC
22	0021_MW106_250404	04 Apr 2025 11:08	W	Ice	4	X								EXTRA SAMPLE FOR LAB QC
23	0021_MW107_250403	03 Apr 2025 11:38	W	Ice	2	X								
24	0021_MW108_250404	04 Apr 2025 11:01	W	Ice	4	X								EXTRA SAMPLE FOR LAB QC
25	0021_MW109_250403	03 Apr 2025 15:35	W	Ice	2	X								
26	0021_MW110_250401	01 Apr 2025 14:24	W	Ice	2	X								
27	0021_MW111_250403	03 Apr 2025 09:47	W	Ice	2	X								
28	0021_MW112_250401	01 Apr 2025 13:41	W	Ice	2	X								
29	0021_MW113_250407	07 Apr 2025 11:36	W	Ice	4	X								EXTRA SAMPLE FOR LAB QC
30	0021_MW114_250404	04 Apr 2025 09:30	W	Ice	4	X								EXTRA SAMPLE FOR LAB QC
31	0021_MW117_250402	02 Apr 2025 14:22	W	Ice	2	X								
32	0021_MW118_250402	02 Apr 2025 15:34	W	Ice	2	X								
33	0021_MW119_250402	02 Apr 2025 16:05	W	Ice	2	X								
34	0021_MW120_250402	02 Apr 2025 14:16	W	Ice	2	X								
35	0021_MW121_250402	02 Apr 2025 17:13	W	Ice	2	X								
36	0021_MW123_250402	02 Apr 2025 15:19	W	Ice	2	X								
37	0021_MW124_250403	03 Apr 2025 08:24	W	Ice	4	X								EXTRA SAMPLE FOR LAB QC
38	0021_MW125_250402	02 Apr 2025 12:03	W	Ice	2	X								
39	0021_MW126_250401	01 Apr 2025 13:15	W	Ice	4	X								EXTRA SAMPLE FOR LAB QC
40	0021_MW127_250402	02 Apr 2025 16:29	W	Ice	4	X								EXTRA SAMPLE FOR LAB QC
41	0021_MW128_250402	02 Apr 2025 16:13	W	Ice	2	X								
42	0021_MW129_250404	04 Apr 2025 17:05	W	Ice	2		X							
43	0021_MW130_250404	04 Apr 2025	W	Ice	2		X							
44	0021_MW131_250401	01 Apr 2025 15:45	W	Ice	4	X								EXTRA SAMPLE FOR LAB QC
45	0021_MW132_250401	01 Apr 2025 16:37	W	Ice	2	X								
46	0021_MW133_250402	02 Apr 2025 11:50	W	Ice	2	X								EXTRA SAMPLE FOR LAB QC
47	0021_MW134_250403	03 Apr 2025 09:14	W	Ice	2	X								
48	0021_MW135_250404	04 Apr 2025 17:12	W	Ice	4		X							EXTRA SAMPLE FOR LAB QC
49	0021_MW136_250404	04 Apr 2025 15:18	W	Ice	2		X							EXTRA SAMPLE FOR LAB QC
50	0021_MW137_250404	04 Apr 2025 14:01	W	Ice	4		X							EXTRA SAMPLE FOR LAB QC
51	0021_MW138_250403	03 Apr 2025 09:19	W	Ice	2		X							
52	0021_MW139_250403	03 Apr 2025 12:15	W	Ice	2		X							EXTRA SAMPLE FOR LAB QC
53	0021_MW140_250403	03 Apr 2025 01:25	W	Ice	2		X							
54	0021_MW150_250404	04 Apr 2025 09:04	W	Ice	4	X								EXTRA SAMPLE FOR LAB QC
55	0021_MW151_250404	04 Apr 2025 09:49	W	Ice	4	X								EXTRA SAMPLE FOR LAB QC
56	0021_MW152_250404	04 Apr 2025 08:16	W	Ice	2	X								

Received by Lab (Date/Time): 02/04/25 10:00 / ES2510622

Relinquished By / Date:

Received By / Date:

Courier / Details:

Received by PC / Internal Staff:

Environmental Division
Sydney
Work Order Reference
ES2510622

Telephone : +61-2-8784 8555

CHAIN OF CUSTODY

ALS Laboratory

CLIENT:	TURNAROUND REQUIREMENT: ☐ Standard TAT (List due date):	LAB USE ONLY	ALS LABORATORY: (circle one)
OFFICE:	(Standard TAT may be longer for some tests e.g. Ultra Trace Organics) ☐ Non-Standard or urgent TAT (List due date):		Address / Phone / Email / Contact
PROJECT:	ALS QUOTE NO.:	COC SEQUENCE NUMBER (Circle)	
ORDER NUMBER:		COC 1 2 3 4 5 6 7	Form ID: COC_EMAIL_20 Version: 10.0
PROJECT MANAGER:	CONTACT PH:	SUB 1 2 3 4 5 6 7	Page 1 of 2

SAMPLER:	SAMPLER MOBILE:	RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
COC emailed to ALS? (YES / NO):	EDD FORMAT (or default):	Signature / Print			
Email Reports to (will also be emailed to Project Manager and Sampler, except if Quote):		DATE/TIME:	DATE/TIME:	DATE/TIME:	DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

ALS USE	SAMPLE DETAILS	CONTAINER INFORMATION	ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to ensure correct analysis) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).	
LAB ID	SAMPLE ID	Date and Time	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL CONTAINERS	EP231X (PFAS Full Suite)	PFAS - Short Chain (Ultra Short Suite) (EP231X-SC)	HOLD	COMMENTS
57	0021_MW153_250404	04 Apr 2025 08:58	W	Nos	4	X			EXTRA SAMPLE FOR LAB QC
58	0021_MW154_250404	04 Apr 2025 09:13	W	Nos	4	X			
59	0021_MW155_250304	03 Apr 2025 10:06	W	Nos	4	X			EXTRA SAMPLE FOR LAB QC
60	0021_MW160_250402	02 Apr 2025 09:32	W	Nos	3	X			
61	0021_MW163_250402	02 Apr 2025 10:56	W	Nos	3	X			
62	0021_MW164_250402	02 Apr 2025 12:10	W	Nos	4	X			
63	0021_OTH001_250407	07 Apr 2025 12:24	W	Nos	4	X			EXTRA SAMPLE FOR LAB QC
64	0021_OTH002_250407	07 Apr 2025 12:08	W	Nos	3	X			
65	0021_OTH003_250407	07 Apr 2025 12:51	W	Nos	3	X			
66	0021_OTH005_250407	07 Apr 2025 13:06	W	Nos	3	X			
67	0021_OTH006_250407	07 Apr 2025 12:15	W	Nos	4	X			EXTRA SAMPLE FOR LAB QC
68	0021_QC102_250331	31 Mar 2025 16:00	W	Nos	4	X			
69	0021_QC103_250401	01 Apr 2025 08:55	W	Nos	2	X			
70	0021_QC104_250401	01 Apr 2025 13:42	W	Nos	2	X			
71	0021_QC105_250401	01 Apr 2025	W	Nos	2	X			
72	0021_QC106_250402	02 Apr 2025 09:30	W	Nos	3	X			
73	0021_QC107_250403	03 Apr 2025 10:00	W	Nos	4	X			
74	0021_QC108_250402	02 Apr 2025 12:15	W	Nos	3		X		
75	0021_QC109_250404	04 Apr 2025 08:30	W	Nos	2	X			
76	0021_QC110_250404	04 Apr 2025 10:45	W	Nos	2	X			
77	0021_QC111_250404	04 Apr 2025 16:45	W	Nos	2	X			
78	0021_QC124_250401	01 Apr 2025 15:45	W	Nos	2	X			
79	0021_QC125_250402	02 Apr 2025	W	Nos	3	X			
80	0021_QC126_250402	02 Apr 2025	W	Nos	4	X			
81	0021_QC139_250403	03 Apr 2025 14:20	W	Nos	2	X			
82	0021_QC140_250404	04 Apr 2025 08:58	W	Nos	2	X			
83	0021_QC141_250404	04 Apr 2025 13:28	W	Nos	2	X			
84	0021_QC154_250401	01 Apr 2025 13:41	W	Nos	2	X			
85	0021_QC155_250402	02 Apr 2025 10:18	W	Nos	3	X			
86	0021_QC156_250403	03 Apr 2025 11:36	W	Nos	2	X			
87	0021_QC157_250407	07 Apr 2025 12:24	W	Nos	3	X			
Fwd	0021_QC202_250331	31 Mar 2025 16:00	W	Nos	2				PLEASE FORWARD TO EUROFINS USING ATTACHED COC
Fwd	0021_QC203_250401	01 Apr 2025 08:55	W	Nos	2				PLEASE FORWARD TO EUROFINS USING ATTACHED COC
Fwd	0021_QC204_250401	01 Apr 2025 13:42	W	Nos	2				PLEASE FORWARD TO EUROFINS USING ATTACHED COC
Fwd	0021_QC205_250401	01 Apr 2025	W	Nos	2				PLEASE FORWARD TO EUROFINS USING ATTACHED COC
Fwd	0021_QC206_250402	02 Apr 2025 09:30	W	Nos	3				PLEASE FORWARD TO EUROFINS USING ATTACHED COC
Fwd	0021_QC208_250403	03 Apr 2025 12:15	W	Nos	3				PLEASE FORWARD TO EUROFINS USING ATTACHED COC
Fwd	0021_QC209_250404	04 Apr 2025 08:30	W	Nos	2				PLEASE FORWARD TO EUROFINS USING ATTACHED COC
Fwd	0021_QC210_250404	04 Apr 2025 10:45	W	Nos	2				PLEASE FORWARD TO EUROFINS USING ATTACHED COC
Fwd	0021_QC211_250404	04 Apr 2025 16:25	W	Nos	2				PLEASE FORWARD TO EUROFINS USING ATTACHED COC
Fwd	0021_QC234_250401	01 Apr 2025 15:45	W	Nos	2				PLEASE FORWARD TO EUROFINS USING ATTACHED COC
Fwd	0021_QC235_250402	02 Apr 2025	W	Nos	3				PLEASE FORWARD TO EUROFINS USING ATTACHED COC
Fwd	0021_QC236_250402	02 Apr 2025	W	Nos	4				PLEASE FORWARD TO EUROFINS USING ATTACHED COC
Fwd	0021_QC239_250403	03 Apr 2025 14:20	W	Nos	2				PLEASE FORWARD TO EUROFINS USING ATTACHED COC
Fwd	0021_QC240_250404	04 Apr 2025 08:58	W	Nos	2				PLEASE FORWARD TO EUROFINS USING ATTACHED COC
Fwd	0021_QC241_250404	04 Apr 2025 13:28	W	Nos	2				PLEASE FORWARD TO EUROFINS USING ATTACHED COC
Fwd	0021_QC254_250402	02 Apr 2025 09:52	W	Nos	3				PLEASE FORWARD TO EUROFINS USING ATTACHED COC
Fwd	0021_QC255_250403	03 Apr 2025 09:24	W	Nos	2				PLEASE FORWARD TO EUROFINS USING ATTACHED COC
Fwd	0021_QC256_250403	03 Apr 2025 13:01	W	Nos	3				PLEASE FORWARD TO EUROFINS USING ATTACHED COC
Fwd	0021_QC257_250407	07 Apr 2025 12:24	W	Nos	4				PLEASE FORWARD TO EUROFINS USING ATTACHED COC
1	0021_SD001_250403	03 Apr 2025 13:52	S	Nos	1	X			
2	0021_SD002_250403	03 Apr 2025 13:10	S	Nos	1	X			
3	0021_SD003_250403	03 Apr 2025	S	Nos	1	X			
4	0021_SD004_250402	02 Apr 2025 09:20	S	Nos	1	X			
5	0021_SD005_250402	02 Apr 2025 09:52	S	Nos	1	X			
6	0021_SD006_250404	04 Apr 2025 16:13	S	Nos	1	X			

CHAIN OF CUSTODY

ALS Laboratory Group

CLIENT:	TURNAROUND REQUIREMENT: ☐ Standard TAT (Use due date):	LABORATORY USE ONLY (Circle)	
OFFICE:	Standard TAT may be longer for some tests (Contact ALS for Standard TAT) ☐ Non-Standard / Urgent TAT (Use due date):		
PROJECT:	ALS QUOTE NO.:	COC SEQUENCE NUMBER (Circle)	
ORDER NUMBER:		1 2 3 4 5 6 7 8 9 10	
PROJECT MANAGER:	CONTACT PH:	OR 1 2 3 4 5 6 7 8 9 10	
SAMPLER:	SAMPLER MOBILE:	RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
COC emailed to ALS? (YES / NO)	EDD FORMAT (or default):				
Email Reports to:		DATE/TIME:	DATE/TIME:	DATE/TIME:	DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

ALS USE ONLY	ANALYSIS REQUEST	ANALYSIS REQUIRED Including SUITES (NOTE: Suite Codes must be listed to attract suite pricing)

LAB ID	SAMPLE ID	Date and Time	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL CONTAINERS	EP231A (PFAS Full Suite)	PFAS - Aqueous Trace Modified Long (EP231 Mod)				HOLD		NOTES
1	0021_SD009_250401	01 Apr 2025 10:00	S	Ice	1	X							
2	0021_SD011_250401	01 Apr 2025 10:30	S	Ice	1	X							
3	0021_SD012_250402	02 Apr 2025 08:40	S	Ice	1	X							
4	0021_SD013_250402	02 Apr 2025 09:07	S	Ice	1	X							
5	0021_SD014_250402	02 Apr 2025 09:10	S	Ice	1	X							
6	0021_SD015_250403	03 Apr 2025 14:20	S	Ice	1	X							EXTRA SAMPLE FOR LAB QC
7	0021_SD016_250402	02 Apr 2025 09:52	S	Ice	1	X							
8	0021_SD017_250402	02 Apr 2025 09:30	S	Ice	1	X							
9	0021_SD018_250403	03 Apr 2025 15:05	S	Ice	1	X							
10	0021_SD020_250403	03 Apr 2025 15:35	S	Ice	1	X							
11	0021_SD021_250404	04 Apr 2025 15:33	S	Ice	1	X							
12	0021_SD023_250401	01 Apr 2025 14:05	S	Ice	1	X							
13	0021_SD028_250404	04 Apr 2025 13:46	S	Ice	1	X							
14	0021_SD029_250403	03 Apr 2025 15:00	S	Ice	1	X							
15	0021_SD030_250404	04 Apr 2025 16:20	S	Ice	1	X							
16	0021_SD031_250407	07 Apr 2025 09:35	S	Ice	1	X							
17	0021_SD035_250401	01 Apr 2025 14:02	S	Ice	1	X							
18	0021_SD036_250401	01 Apr 2025 12:51	S	Ice	1	X							
19	0021_SD037_250401	01 Apr 2025 11:52	S	Ice	1	X							
20	0021_SD040_250403	03 Apr 2025 13:30	S	Ice	1	X							
21	0021_SD043_250403	03 Apr 2025	S	Ice	1	X							
22	0021_SD044_250401	01 Apr 2025 13:42	S	Ice	1	X							
23	0021_SD046_250401	01 Apr 2025 14:30	S	Ice	1	X							
24	0021_SD049_250404	04 Apr 2025 14:41	S	Ice	1	X							
25	0021_SD050_250401	01 Apr 2025 09:20	S	Ice	1	X							
26	0021_SD054_250402	02 Apr 2025	S	Ice	1	X							
27	0021_SD058_250401	01 Apr 2025 08:55	S	Ice	1	X							
28	0021_SD059_250401	01 Apr 2025	S	Ice	1	X							
29	0021_SD066_250402	02 Apr 2025 09:55	S	Ice	1	X							
30	0021_SD067_250402	02 Apr 2025 09:40	S	Ice	1	X							
31	0021_SD068_250402	02 Apr 2025 09:30	S	Ice	1	X							
32	0021_SD069_250402	02 Apr 2025 10:04	S	Ice	1	X							
33	0021_SD070_250402	02 Apr 2025 08:22	S	Ice	1	X							
34	0021_SD073_250401	01 Apr 2025 10:45	S	Ice	1	X							
35	0021_SD075_250401	01 Apr 2025 10:40	S	Ice	1	X							
36	0021_SD080_250404	04 Apr 2025 13:28	S	Ice	1	X							
37	0021_SD092_250404	04 Apr 2025 16:25	S	Ice	1	X							
38	0021_SD110_250402	02 Apr 2025 08:36	S	Ice	1	X							
39	0021_SD111_250401	01 Apr 2025 12:10	S	Ice	1	X							
40	0021_SD166_250403	03 Apr 2025 08:00	S	Ice	1	X							
41	0021_SD125_A_250403	03 Apr 2025	S	Ice	2	X							
42	0021_SW001_250403	03 Apr 2025 13:50	W	Ice	2	X							
43	0021_SW001_250403	03 Apr 2025	W	Ice	2	X							
44	0021_SW004_250402	02 Apr 2025 08:20	W	Ice	2	X							
45	0021_SW005_250402	02 Apr 2025 08:30	W	Ice	2	X							
46	0021_SW006_250402	02 Apr 2025 08:52	W	Ice	2	X							
47	0021_SW010_250404	04 Apr 2025 16:13	W	Ice	1	X							
48	0021_SW012_250331	31 Mar 2025 15:00	W	Ice	1	X							
49	0021_SW013_250401	01 Apr 2025 10:00	W	Ice	2	X							
50	0021_SW016_250402	02 Apr 2025 09:10	W	Ice	2	X							
51	0021_SW019_250403	03 Apr 2025 14:20	W	Ice	2	X							
52	0021_SW020_250402	02 Apr 2025 09:52	W	Ice	1	X							
53	0021_SW021_250402	02 Apr 2025 09:30	W	Ice	2	X							EXTRA SAMPLE FOR LAB QC
54	0021_SW022_250403	03 Apr 2025 16:05	W	Ice	2	X							
55	0021_SW024_250403	03 Apr 2025 15:35	W	Ice	2	X							
56	0021_SW025_250404	04 Apr 2025 16:03	W	Ice	2	X							

CHAIN OF CUSTODY

ALS Laboratory group

CLIENT:	TURNAROUND REQUIREMENT: ☐ Standard TAT (Lab to state date)		
OFFICE:	☐ Non-Standard or urgent TAT (Lab to state date)		
PROJECT:	ALS QUOTE NO.:		
ORDER NUMBER:			
PROJECT MANAGER:	CONTACT PH:		
SAMPLER:	SAMPLER MOBILE:		
COC emailed to ALS? (YES / NO)	EDD FORMAT (or default):		
Email Reports to:			

QOC SEQUENCE NUMBER (Client)

COC:	1	2	3	4	5	6	7	
OF:	1	2	3	4	5	6	7	

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
DATE/TIME:	DATE/TIME:	DATE/TIME:	DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

ALS USE	STATUS (ALS USE)	OTHER INFORMATION	ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price)

Where Metals are required, indicate if total (unfiltered bottle required) or dissolved (field filtered bottle required).

LAB ID	SAMPLE ID	Date and Time	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL CONTAINERS	PFAS (PFAS Full Suite)	PFAS - Direct Trace Waters Low Suite (EP231X)				HOLD		
63	0021_SW027_250401	01 Apr 2025 14:06	W	ICE	2	X							
64	0021_SW032_250401	01 Apr 2025 13:28	W	ICE	2	X							
65	0021_SW034_250106	04 Apr 2025 10:45	W	ICE	2	X							
66	0021_SW035_250403	03 Apr 2025 11:00	W	ICE	2	X							
67	0021_SW035_250404	04 Apr 2025 10:30	W	ICE	2		X						
68	0021_SW037_250407	07 Apr 2025 08:33	W	ICE	2		X						EXTRA SAMPLE FOR LAB QC
69	0021_SW040_250404	04 Apr 2025 16:25	W	ICE	2		X						
70	0021_SW043_250401	01 Apr 2025 14:02	W	ICE	2	X							
71	0021_SW044_250401	01 Apr 2025 12:51	W	ICE	2	X							
72	0021_SW045_250401	01 Apr 2025 11:52	W	ICE	2	X							
73	0021_SW048_250305	05 Apr 2025 13:39	W	ICE	2	X							
74	0021_SW051_250403	03 Apr 2025	W	ICE	2	X							
75	0021_SW052_250401	01 Apr 2025 13:47	W	ICE	2	X							
76	0021_SW053_250401	01 Apr 2025 12:19	W	ICE	2	X							
77	0021_SW056_250401	01 Apr 2025 14:30	W	ICE	2	X							
78	0021_SW057_250401	01 Apr 2025	W	ICE	2	X							
79	0021_SW058_250401	01 Apr 2025 12:30	W	ICE	2	X							
80	0021_SW060_250404	04 Apr 2025 14:41	W	ICE	2	X							
1	0021_SW060_250401	01 Apr 2025 09:26	W	ICE	2	X							
2	0021_SW062_250402	02 Apr 2025	W	ICE	2	X							
3	0021_SW064_250402	02 Apr 2025	W	ICE	2	X							
4	0021_SW068_250401	01 Apr 2025 09:55	W	ICE	2	X							
5	0021_SW069_250401	01 Apr 2025	W	ICE	2	X							
6	0021_SW070_250402	02 Apr 2025 09:05	W	ICE	2	X							
7	0021_SW075_250402	02 Apr 2025 09:30	W	ICE	2	X							
8	0021_SW079_250402	02 Apr 2025 09:54	W	ICE	2	X							
9	0021_SW080_250402	02 Apr 2025 09:22	W	ICE	2	X							
10	0021_SW035_250404	04 Apr 2025 10:45	W	ICE	2	X							
11	0021_SW035_250401	01 Apr 2025 10:30	W	ICE	2	X							
12	0021_SW110_250402	02 Apr 2025 12:10	W	ICE	2	X							
13	0021_SW112_250403	03 Apr 2025 11:30	W	ICE	2	X							
14	0021_SW126_250405	05 Apr 2025 14:00	W	ICE	4	X							EXTRA SAMPLE FOR LAB QC
15	0021_SW127_250401	01 Apr 2025 12:02	W	ICE	4	X							EXTRA SAMPLE FOR LAB QC
16	0021_SW129_250403	03 Apr 2025 14:44	W	ICE	2	X							
17	0021_SW132_250331	31 Mar 2025 16:00	W	ICE	4	X							EXTRA SAMPLE FOR LAB QC
18	0021_SW135_250402	02 Apr 2025 09:09	W	ICE	4	X							
19	0021_SW211_250403	03 Apr 2025 09:09	W	ICE	2	X							
20	0021_SW212_250404	04 Apr 2025 11:00	W	ICE	2	X							
21	0021_QC300_250401	1/04/2025	W	ICE	4	X							
22	0021_QC301_250402	2/04/2025	W	ICE	2	X							
23	0021_QC302_250403	3/04/2025	W	ICE	4	X							
24	0021_QC331_250401	1/04/2025	W	ICE	2	X							
25	0021_QC332_250402	2/04/2025	W	ICE	2	X							
26	0021_QC333_250403	3/04/2025	W	ICE	1	X							
27	0021_QC334_250404	4/04/2025	W	ICE	2	X							
28	0021_QC335_250405	5/04/2025	W	ICE	2	X							
29	0021_QC360_250401	1/04/2025	W	ICE	2	X							
30	0021_QC361_250402	2/04/2025	W	ICE	2	X							
31	0021_QC362_250403	3/04/2025	W	ICE	2	X							
32	0021_QC363_250404	4/04/2025	W	ICE	2	X							
33	0021_QC364_250405	5/04/2025	W	ICE	2	X							
34	0021_QC365_250406	6/04/2025	W	ICE	2	X							
35	0021_QC367_250407	7/04/2025	W	ICE	2	X							
36	0021_QC361_250403	3/04/2025	W	ICE	2	X							
37	0021_QC362_250404	4/04/2025	W	ICE	2	X							
38	0021_QC363_250407	7/04/2025	W	ICE	2	X							

CHAIN OF CUSTODY

ALS Environmental

CLIENT:	TURNAROUND REQUIREMENT: ☐ Standard TAT (List due date):	FOR LABORATORY USE ONLY (Circle)
OFFICE:	Standard TAT may be longer for some tests (e.g. Ultra Trace Organics) ☐ Non Standard or urgent TAT (List due date):	Temperature on Receipt (°C):
PROJECT:	ALS QUOTE NO.:	COC SEQUENCE NUMBER (Circle):
ORDER NUMBER:		COC: 1 2 3 4 5 6 7
PROJECT MANAGER:	CONTACT PH:	COC: 1 2 3 4 5 6 7

SAMPLER:	SAMPLER MOBILE:	RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
COC emailed to ALS? (YES / NO)	EDD FORMAT (or default):				
Email Reports to:		DATE/TIME:	DATE/TIME:	DATE/TIME:	DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

ALS USE ONLY	SAMPLE DETAILS MATRIX: SOLID (S) WATER (W)		CONTAINER INFORMATION			ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to ensure Laboratory analyses the correct tests) Where Metals are required, indicate if Total (unfiltered) or Dissolved (filtered) sample (or both). Indicate Filtered (F), Preserved (P) or both (F/P).							
LAB ID	SAMPLE ID	Date and Time	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL CONTAINERS	EP231X (PFAS Full Suite)	OP&P Suite 4 Trace (Historic Pesticide Suite) (EP231P/X-ST)				HOLD			
[illegible]	0021_QC502_250401	1/04/2025	W	HCl	2	X								
[illegible]	0021_QC503_250401	1/04/2025	W	HCl	2						X			
[illegible]	0021_QC505_250331	31/03/2025	S	ICE	1	X								
[illegible]	0021_QC506_250331	31-Mar	S	ICE	1						X			

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Sydney
Unit F3 - 6 Building F, 16 Mars Road, Lane Cove
Phone: +612 9900 8400
Email: enviro.syd@mgtlabmark.com.au

Brisbane
Unit 1-21 Smallwood Place, Murarrie
Phone: +617 3902 4600
Email: enviro.bris@mgtlabmark.com.au

Melbourne
2 Dalgleish Town Close, Oakleigh, VIC 3166
Phone: +613 8564 5000 Fax: +613 8564 5090
Email: enquiries.melb@mgtlabmark.com.au

CHAIN OF CUSTODY RECORD

CLIENT DETAILS :

Page 1 of 1

Company Name : GHD Pty Ltd	Contact Name : Jarrad Mullaley 0417 375 028	Purchase Order :	COC Number :
Office Address : Level 15, 133 Castlereagh Street, Sydney NSW 2000	Project Manager : Helen Millett / Adam Shipp Email Results : jarrad.mullaley@ghd.com; adam.shipp@ghd.com; helen.millett@ghd.com; enviro.nsw@ghd.com	PROJECT Number : 12626622 PROJECT Name : ACT_0021_PFASOMP_25	Eurofins | mgt quote ID : Data output format: ESDAT

Special Directions & Comments :

Forwarded from ALS

Eurofins | mgt 01 water batch number:

Analytes

PFAS Extended Suite - 30 PFAS

PFAS Extended Suite - 30 PFAS - Soils Only

PFASP

	Sample ID	Date	Matrix	PFAS Extended Suite - 30 PFAS	PFAS Extended Suite - 30 PFAS - Soils Only	PFASP	Containers: 500P	250P	60P	ILA	40mL Vial	250mL A	Jar	Bag	Sample comments:
1	0021_QC202_250331	31 Mar 2025 16:00	W	x											2x Containers
2	0021_QC203_250401	01 Apr 2025 08:55	W	x											2x Containers
3	0021_QC204_250401	01 Apr 2025 13:42	W	x											2x Containers
4	0021_QC205_250401	01 Apr 2025	W	x											2x Containers
5	0021_QC206_250402	02 Apr 2025 09:30	W	x											2x Containers
6	0021_QC208_250403	03 Apr 2025 12:15	W		x										2x Containers
7	0021_QC209_250404	04 Apr 2025 09:30	W	x											2x Containers
8	0021_QC210_250404	04 Apr 2025 10:45	S	x											1x Containers
9	0021_QC211_250404	04 Apr 2025 16:25	S	x											1x Containers
10	0021_QC234_250401	01 Apr 2025 15:45	W	x											2x Containers
11	0021_QC235_250402	02 Apr 2025	W	x											2x Containers
12	0021_QC236_250402	02 Apr 2025	S	x											1x Containers
13	0021_QC239_250403	03 Apr 2025 14:20	S	x											1x Containers
14	0021_QC240_250404	04 Apr 2025 09:58	W	x											2x Containers
15	0021_QC241_250404	04 Apr 2025 13:28	S	x											1x Containers
16	0021_QC254_250402	02 Apr 2025 09:32	W	x											2x Containers
17	0021_QC255_250403	03 Apr 2025 09:24	W	x											2x Containers
18	0021_QC256_250403	03 Apr 2025 12:01	W	x											2x Containers
19	0021_QC257_250407	07 Apr 2025 12:24	W	x											2x Containers

Some common holding times (with correct preservation):
For further information contact the lab

Waters		Soils	
BTEX, MAH, VOC	14 days	BTEX, MAH, VOC	14 days
TRH, PAH, Phenols, Pesticides	7 days	TRH, PAH, Phenols, Pesticides	14 days
Heavy Metals	6 months	Heavy Metals	6 months
Mercury, CrVI	28 days	Mercury, CrVI	28 days
Microbiological testing	24 hours	Microbiological testing	72 hours
BOD, Nitrate, Nitrite, Total N	2 days	Anions	28 days
Solids - TSS, TDS etc	7 days	SPOCAS, pH Field and FOX, CrS	24 hours
Ferrous iron	7 days	ASLP, TCLP	7 days

Relinquished By: Andrew Duval (GHD)

Date & Time : 3/4/2025

Signature: A.Duval

Turn around time

1 DAY ☐ 2 DAY ☐ 3 DAY ☐

5 DAY ☑ 10 DAY ☐ Other:

Method Of Shipment

☐ Courier
☐ Hand Delivered
☐ Postal
Courier Consignment #:

Temperature on arrival:

Report number:

SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order	: **ES2510622**		
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
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	: 12626622	Page	: 1 of 5
Order number	: 12626622	Quote number	: ES2023GHDSER0026 (ES23GHDSER0026)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: ----		
Sampler	: Jarrad Mawbey		

Dates

Date Samples Received	: 08-Apr-2025 14:20	Issue Date	: 29-Apr-2025
Client Requested Due Date	: 29-Apr-2025	Scheduled Reporting Date	: **29-Apr-2025**

Delivery Details

Mode of Delivery	: Undefined	Security Seal	: Not Available
No. of coolers/boxes	: 7	Temperature	: 5.1, 5.0, 3.2°C - Ice present
Receipt Detail	:	No. of samples received / analysed	: 80 / 80

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
- Split workorder - Remaining samples have been logged under ES2510113 and ES2510623.
- **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-SD PFAS - Full Suite (30 analytes) in Sediments
ES2510622-001	03-Apr-2025 13:52	0021_SD001_250403	✓	✓
ES2510622-002	03-Apr-2025 15:10	0021_SD002_250403	✓	✓
ES2510622-003	03-Apr-2025 00:00	0021_SD003_250403	✓	✓
ES2510622-004	02-Apr-2025 08:30	0021_SD004_250402	✓	✓
ES2510622-005	02-Apr-2025 08:52	0021_SD005_250402	✓	✓
ES2510622-006	04-Apr-2025 16:13	0021_SD006_250404	✓	✓
ES2510622-007	01-Apr-2025 16:00	0021_SD009_250401	✓	✓
ES2510622-008	01-Apr-2025 16:30	0021_SD011_250401	✓	✓
ES2510622-009	02-Apr-2025 08:45	0021_SD012_250402	✓	✓
ES2510622-010	02-Apr-2025 09:07	0021_SD013_250402	✓	✓
ES2510622-011	02-Apr-2025 09:10	0021_SD014_250402	✓	✓
ES2510622-012	03-Apr-2025 14:20	0021_SD015_250403	✓	✓
ES2510622-013	02-Apr-2025 09:52	0021_SD016_250402	✓	✓
ES2510622-014	02-Apr-2025 09:30	0021_SD017_250402	✓	✓
ES2510622-015	03-Apr-2025 16:05	0021_SD018_250403	✓	✓
ES2510622-016	03-Apr-2025 15:25	0021_SD020_250403	✓	✓
ES2510622-017	04-Apr-2025 15:33	0021_SD021_250404	✓	✓
ES2510622-018	01-Apr-2025 14:05	0021_SD023_250401	✓	✓
ES2510622-019	04-Apr-2025 13:45	0021_SD028_250404	✓	✓
ES2510622-020	03-Apr-2025 10:00	0021_SD029_250403	✓	✓
ES2510622-021	04-Apr-2025 16:20	0021_SD030_250404	✓	✓
ES2510622-022	07-Apr-2025 08:35	0021_SD031_250407	✓	✓
ES2510622-023	01-Apr-2025 14:02	0021_SD035_250401	✓	✓
ES2510622-024	01-Apr-2025 12:51	0021_SD036_250401	✓	✓
ES2510622-025	01-Apr-2025 11:52	0021_SD037_250401	✓	✓
ES2510622-026	03-Apr-2025 15:39	0021_SD040_250403	✓	✓
ES2510622-027	03-Apr-2025 00:00	0021_SD043_250403	✓	✓
ES2510622-028	01-Apr-2025 13:42	0021_SD044_250401	✓	✓
ES2510622-029	01-Apr-2025 14:30	0021_SD046_250401	✓	✓
ES2510622-030	04-Apr-2025 14:41	0021_SD049_250404	✓	✓
ES2510622-031	01-Apr-2025 09:26	0021_SD050_250401	✓	✓
ES2510622-032	02-Apr-2025 00:00	0021_SD054_250402	✓	✓
ES2510622-033	01-Apr-2025 08:55	0021_SD058_250401	✓	✓
ES2510622-034	01-Apr-2025 15:00	0021_SD059_250401	✓	✓
ES2510622-035	02-Apr-2025 09:55	0021_SD066_250402	✓	✓

			SOIL - EA055-103 Moisture Content	SOIL - EP231X-SD PFAS - Full Suite (30 analytes) in Sediments
ES2510622-036	02-Apr-2025 09:40	0021_SD067_250402	✓	✓
ES2510622-037	02-Apr-2025 09:30	0021_SD068_250402	✓	✓
ES2510622-038	02-Apr-2025 08:54	0021_SD069_250402	✓	✓
ES2510622-039	02-Apr-2025 08:22	0021_SD070_250402	✓	✓
ES2510622-040	04-Apr-2025 10:45	0021_SD073_250404	✓	✓
ES2510622-041	01-Apr-2025 10:40	0021_SD075_250401	✓	✓
ES2510622-042	04-Apr-2025 13:28	0021_SD080_250404	✓	✓
ES2510622-043	04-Apr-2025 16:25	0021_SD093_250404	✓	✓
ES2510622-044	02-Apr-2025 08:36	0021_SD110_250402	✓	✓
ES2510622-045	01-Apr-2025 12:19	0021_SD111_250401	✓	✓
ES2510622-046	03-Apr-2025 08:09	0021_SD188_250403	✓	✓
ES2510622-047	03-Apr-2025 00:00	0021_SD188_A_250403	✓	✓

Matrix: **WATER**

Laboratory sample ID	*Sampling date / time*	*Sample ID*	WATER - EP231X PFAS - Full Suite (31 analytes)	WATER - EP231X-ST PFAS - Full Suite (30 analytes) Super Trace
ES2510622-048	03-Apr-2025 13:52	0021_SW001_250403	✓	
ES2510622-049	03-Apr-2025 00:00	0021_SW003_250403	✓	
ES2510622-050	02-Apr-2025 08:30	0021_SW004_250402	✓	
ES2510622-051	02-Apr-2025 08:36	0021_SW005_250402	✓	
ES2510622-052	02-Apr-2025 08:52	0021_SW006_250402	✓	
ES2510622-053	04-Apr-2025 16:13	0021_SW010_250404	✓	
ES2510622-054	31-Mar-2025 15:00	0021_SW012_250331	✓	
ES2510622-055	01-Apr-2025 16:00	0021_SW013_250401	✓	
ES2510622-056	02-Apr-2025 09:10	0021_SW018_250402	✓	
ES2510622-057	03-Apr-2025 14:20	0021_SW019_250403	✓	
ES2510622-058	02-Apr-2025 09:52	0021_SW020_250402	✓	
ES2510622-059	02-Apr-2025 09:30	0021_SW021_250402	✓	
ES2510622-060	03-Apr-2025 16:05	0021_SW022_250403	✓	
ES2510622-061	03-Apr-2025 15:25	0021_SW024_250403	✓	
ES2510622-062	04-Apr-2025 15:33	0021_SW025_250404	✓	
ES2510622-063	01-Apr-2025 14:05	0021_SW027_250401	✓	
ES2510622-064	04-Apr-2025 13:28	0021_SW032_250404	✓	

			WATER - EP231X PFAS - Full Suite (31 analytes)	WATER - EP231X-ST PFAS - Full Suite (30 analytes) Super Trace
ES2510622-065	04-Apr-2025 13:45	0021_SW034_250404	✓	
ES2510622-066	03-Apr-2025 10:00	0021_SW035_250403	✓	
ES2510622-067	04-Apr-2025 16:20	0021_SW036_250404		✓
ES2510622-068	07-Apr-2025 08:36	0021_SW037_250407		✓
ES2510622-069	04-Apr-2025 16:25	0021_SW040_250404		✓
ES2510622-070	01-Apr-2025 14:02	0021_SW043_250401	✓	
ES2510622-071	01-Apr-2025 12:51	0021_SW044_250401	✓	
ES2510622-072	01-Apr-2025 11:52	0021_SW045_250401	✓	
ES2510622-073	03-Apr-2025 15:39	0021_SW048_250403	✓	
ES2510622-074	03-Apr-2025 00:00	0021_SW051_250403	✓	
ES2510622-075	01-Apr-2025 13:42	0021_SW052_250401	✓	
ES2510622-076	01-Apr-2025 12:19	0021_SW053_250401	✓	
ES2510622-077	01-Apr-2025 14:30	0021_SW056_250401	✓	
ES2510622-078	01-Apr-2025 00:00	0021_SW057_250401	✓	
ES2510622-079	01-Apr-2025 12:30	0021_SW058_250401	✓	
ES2510622-080	04-Apr-2025 14:41	0021_SW059_250404	✓	

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)	Email	andrew.duval@ghd.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	andrew.duval@ghd.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	andrew.duval@ghd.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	andrew.duval@ghd.com
- Chain of Custody (CoC) (COC)	Email	andrew.duval@ghd.com
- EDI Format - ESDAT (ESDAT)	Email	andrew.duval@ghd.com
- Electronic SRN for ESdat (ESRN_ESDAT)	Email	andrew.duval@ghd.com
GHD LAB REPORTS		
- *AU Certificate of Analysis - NATA (COA)	Email	ghdlabreports@ghd.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	ghdlabreports@ghd.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	ghdlabreports@ghd.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	ghdlabreports@ghd.com
- Chain of Custody (CoC) (COC)	Email	ghdlabreports@ghd.com
- EDI Format - ESDAT (ESDAT)	Email	ghdlabreports@ghd.com
- Electronic SRN for ESdat (ESRN_ESDAT)	Email	ghdlabreports@ghd.com
HELEN MILNE		
- *AU Certificate of Analysis - NATA (COA)	Email	helen.milne@ghd.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	helen.milne@ghd.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	helen.milne@ghd.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	helen.milne@ghd.com
- Chain of Custody (CoC) (COC)	Email	helen.milne@ghd.com
- EDI Format - ESDAT (ESDAT)	Email	helen.milne@ghd.com
- Electronic SRN for ESdat (ESRN_ESDAT)	Email	helen.milne@ghd.com
Jarrad Mawbey		
- *AU Certificate of Analysis - NATA (COA)	Email	Jarrad.Mawbey@ghd.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	Jarrad.Mawbey@ghd.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	Jarrad.Mawbey@ghd.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	Jarrad.Mawbey@ghd.com
- Chain of Custody (CoC) (COC)	Email	Jarrad.Mawbey@ghd.com
- EDI Format - ESDAT (ESDAT)	Email	Jarrad.Mawbey@ghd.com
- Electronic SRN for ESdat (ESRN_ESDAT)	Email	Jarrad.Mawbey@ghd.com

CERTIFICATE OF ANALYSIS

Work Order	: **ES2510622**	Page	: 1 of 41
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	: 12626622	Date Samples Received	: 08-Apr-2025 14:20
Order number	: 12626622	Date Analysis Commenced	: 14-Apr-2025
C-O-C number	: ----	Issue Date	: 29-Apr-2025 10:53
Sampler	: Jarrad Mawbey		
Site	: ----		
Quote number	: ES23GHDSER0026		
No. of samples received	: 80		
No. of samples analysed	: 80		

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*
Ankit Joshi	Senior Chemist - Inorganics	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-SD: LOR for some analytes on sample ES2510622-32,39 raised due to high moisture content.
- ****Manual Comment****to appear on COA**
- EP231X-SD: LOR raised due to high moisture content.
- Amendment (24/04/2025): This report has been amended following the change in sampling dates for samples 028 & 032
- Amendment (29/04/2025):This report has been amended following the change in sample dates

Analytical Results

Sub-Matrix: SEDIMENT (Matrix: SOIL)				Sample ID	0021_SD001_250403	0021_SD002_250403	0021_SD003_250403	0021_SD004_250402	0021_SD005_250402
				Sampling date / time	03-Apr-2025 13:52	03-Apr-2025 15:10	03-Apr-2025 00:00	02-Apr-2025 08:30	02-Apr-2025 08:52
Compound	CAS Number	LOR	Unit		ES2510622-001	ES2510622-002	ES2510622-003	ES2510622-004	ES2510622-005
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	0.1	%		**28.8**	**19.2**	**59.8**	**31.4**	**39.2**
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg		**0.0004**	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg		**0.0498**	**0.0127**	**0.0056**	**0.0008**	**0.0010**
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg		**0.0097**	**0.0023**	**0.0003**	<0.0002	<0.0002
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg		**0.0006**	**0.0002**	<0.0002	<0.0002	<0.0002
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg		**0.0013**	**0.0002**	<0.0002	<0.0002	<0.0002
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg		**0.0002**	<0.0002	<0.0002	<0.0002	<0.0002
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg		**0.0004**	<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
Perfluoropentanoic acid (PFPeA)	2706-90-3	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
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg		**0.0006**	<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
Perfluorododecanoic acid (PFDoDA)	307-55-1	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
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg		<0.001	<0.001	<0.001	<0.001	<0.001
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg		**0.0005**	<0.0002	<0.0002	<0.0002	<0.0002

Analytical Results

Sub-Matrix: SEDIMENT (Matrix: SOIL)				Sample ID	0021_SD001_250403	0021_SD002_250403	0021_SD003_250403	0021_SD004_250402	0021_SD005_250402
				Sampling date / time	03-Apr-2025 13:52	03-Apr-2025 15:10	03-Apr-2025 00:00	02-Apr-2025 08:30	02-Apr-2025 08:52
Compound	CAS Number	LOR	Unit		ES2510622-001	ES2510622-002	ES2510622-003	ES2510622-004	ES2510622-005
					Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	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-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	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-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
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
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
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
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 PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg		**0.0595**	**0.0150**	**0.0059**	**0.0008**	**0.0010**
Sum of PFAS (WA DER List)	----	0.0002	mg/kg		**0.0605**	**0.0150**	**0.0059**	**0.0008**	**0.0010**
Sum of PFAS	----	0.0002	mg/kg		**0.0647**	**0.0154**	**0.0059**	**0.0008**	**0.0010**
EP231S: PFAS Surrogate									
13C8-PFOA	----	0.0002	%		**104**	**64.3**	**97.6**	**107**	**98.4**
13C4-PFOS	----	0.0002	%		**95.4**	**67.2**	**94.6**	**105**	**88.0**

Analytical Results

Sub-Matrix: SEDIMENT (Matrix: SOIL)				Sample ID	0021_SD006_250404	0021_SD009_250401	0021_SD011_250401	0021_SD012_250402	0021_SD013_250402
				Sampling date / time	04-Apr-2025 16:13	01-Apr-2025 16:00	01-Apr-2025 16:30	02-Apr-2025 08:45	02-Apr-2025 09:07
Compound	CAS Number	LOR	Unit		ES2510622-006	ES2510622-007	ES2510622-008	ES2510622-009	ES2510622-010
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	0.1	%		**89.7**	**36.4**	**16.9**	**16.2**	**16.6**
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg		**0.0005**	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg		**0.150**	**0.0093**	**0.0010**	<0.0002	**0.0011**
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg		**0.0229**	**0.0022**	**0.0004**	<0.0002	<0.0002
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg		**0.0014**	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg		**0.0093**	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg		**0.0006**	<0.0002	<0.0002	<0.0002	<0.0002
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg		**0.0003**	<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		<0.0006	<0.0005	<0.0005	<0.0005	<0.0005
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg		**0.0016**	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg		**0.0008**	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg		**0.0004**	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg		**0.0028**	<0.0002	<0.0002	<0.0002	<0.0002
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg		**0.0006**	<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
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg		<0.001	<0.001	<0.001	<0.001	<0.001
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg		**0.0011**	<0.0002	<0.0002	<0.0002	<0.0002

Analytical Results

Sub-Matrix: SEDIMENT (Matrix: SOIL)				Sample ID	0021_SD006_250404	0021_SD009_250401	0021_SD011_250401	0021_SD012_250402	0021_SD013_250402
				Sampling date / time	04-Apr-2025 16:13	01-Apr-2025 16:00	01-Apr-2025 16:30	02-Apr-2025 08:45	02-Apr-2025 09:07
Compound	CAS Number	LOR	Unit		ES2510622-006	ES2510622-007	ES2510622-008	ES2510622-009	ES2510622-010
					Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg		<0.0006	<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-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg		<0.0006	<0.0005	<0.0005	<0.0005	<0.0005
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg		<0.0006	<0.0005	<0.0005	<0.0005	<0.0005
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg		<0.0006	<0.0005	<0.0005	<0.0005	<0.0005
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
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
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
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
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 PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg		**0.173**	**0.0115**	**0.0014**	<0.0002	**0.0011**
Sum of PFAS (WA DER List)	----	0.0002	mg/kg		**0.179**	**0.0115**	**0.0014**	<0.0002	**0.0011**
Sum of PFAS	----	0.0002	mg/kg		**0.194**	**0.0115**	**0.0014**	<0.0002	**0.0011**
EP231S: PFAS Surrogate									
13C8-PFOA	----	0.0002	%		**100**	**102**	**98.8**	**100**	**104**
13C4-PFOS	----	0.0002	%		**97.4**	**97.6**	**87.2**	**98.5**	**94.8**

Analytical Results

Sub-Matrix: SEDIMENT (Matrix: SOIL)			Sample ID	0021_SD014_250402	0021_SD015_250403	0021_SD016_250402	0021_SD017_250402	0021_SD018_250403
			Sampling date / time	02-Apr-2025 09:10	03-Apr-2025 14:20	02-Apr-2025 09:52	02-Apr-2025 09:30	03-Apr-2025 16:05
Compound	CAS Number	LOR	Unit	ES2510622-011	ES2510622-012	ES2510622-013	ES2510622-014	ES2510622-015
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	0.1	%	**18.5**	**26.8**	**62.3**	**59.6**	**63.6**
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	**0.0006**	**0.0002**	**0.0004**	**0.0002**
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	**0.0307**	**0.0398**	**0.0845**	**0.0341**
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	**0.0002**	**0.0088**	**0.0103**	**0.0112**	**0.0062**
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	**0.0006**	**0.0005**	**0.0014**	**0.0003**
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	**0.0011**	**0.0024**	**0.0006**
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	**0.0006**	<0.0002	**0.0002**	<0.0002
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	**0.0015**	<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
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	**0.0005**	<0.0002
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	**0.0002**	**0.0003**	**0.0009**	<0.0002
Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	**0.0003**	<0.0002
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	**0.0004**	**0.0003**	**0.0014**	<0.0002
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	**0.0003**	<0.0002
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	**0.0009**	<0.0002
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	**0.0008**	<0.0002
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	<0.001	<0.001	<0.001
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: SEDIMENT (Matrix: SOIL)				Sample ID	0021_SD014_250402	0021_SD015_250403	0021_SD016_250402	0021_SD017_250402	0021_SD018_250403
				Sampling date / time	02-Apr-2025 09:10	03-Apr-2025 14:20	02-Apr-2025 09:52	02-Apr-2025 09:30	03-Apr-2025 16:05
Compound	CAS Number	LOR	Unit		ES2510622-011	ES2510622-012	ES2510622-013	ES2510622-014	ES2510622-015
					Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	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-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	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-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
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
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
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
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 PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg		**0.0002**	**0.0395**	**0.0501**	**0.0957**	**0.0403**
Sum of PFAS (WA DER List)	----	0.0002	mg/kg		**0.0002**	**0.0407**	**0.0507**	**0.0990**	**0.0403**
Sum of PFAS	----	0.0002	mg/kg		**0.0002**	**0.0422**	**0.0535**	**0.108**	**0.0421**
EP231S: PFAS Surrogate									
13C8-PFOA	----	0.0002	%		**97.8**	**97.9**	**97.7**	**99.6**	**102**
13C4-PFOS	----	0.0002	%		**95.8**	**88.2**	**95.9**	**96.0**	**94.4**

Analytical Results

Sub-Matrix: SEDIMENT (Matrix: SOIL)				Sample ID	0021_SD020_250403	0021_SD021_250404	0021_SD023_250401	0021_SD028_250404	0021_SD029_250403
				Sampling date / time	03-Apr-2025 15:25	04-Apr-2025 15:33	01-Apr-2025 14:05	04-Apr-2025 13:45	03-Apr-2025 10:00
Compound	CAS Number	LOR	Unit		ES2510622-016	ES2510622-017	ES2510622-018	ES2510622-019	ES2510622-020
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	0.1	%		**60.2**	**51.8**	**49.5**	**23.1**	**25.0**
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg		<0.0002	**0.0002**	**0.0003**	<0.0002	<0.0002
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg		**0.0008**	**0.0329**	**0.0074**	**0.0008**	<0.0002
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg		**0.0006**	**0.0045**	**0.0060**	<0.0002	<0.0002
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg		<0.0002	**0.0003**	<0.0002	<0.0002	<0.0002
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg		<0.0002	**0.0005**	<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
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg		<0.0002	**0.0007**	**0.0022**	<0.0002	<0.0002
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg		<0.0002	**0.0003**	<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
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg		<0.0002	**0.0016**	**0.0075**	<0.0002	<0.0002
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg		<0.0002	**0.0003**	**0.0004**	<0.0002	<0.0002
Perfluorododecanoic acid (PFDoDA)	307-55-1	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
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg		<0.001	<0.001	**0.002**	<0.001	<0.001
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: SEDIMENT (Matrix: SOIL)				Sample ID	0021_SD020_250403	0021_SD021_250404	0021_SD023_250401	0021_SD028_250404	0021_SD029_250403
				Sampling date / time	03-Apr-2025 15:25	04-Apr-2025 15:33	01-Apr-2025 14:05	04-Apr-2025 13:45	03-Apr-2025 10:00
Compound	CAS Number	LOR	Unit		ES2510622-016	ES2510622-017	ES2510622-018	ES2510622-019	ES2510622-020
					Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	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-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	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-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
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
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
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
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 PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg		**0.0014**	**0.0374**	**0.0134**	**0.0008**	<0.0002
Sum of PFAS (WA DER List)	----	0.0002	mg/kg		**0.0014**	**0.0403**	**0.0255**	**0.0008**	<0.0002
Sum of PFAS	----	0.0002	mg/kg		**0.0014**	**0.0423**	**0.0258**	**0.0008**	<0.0002
EP231S: PFAS Surrogate									
13C8-PFOA	----	0.0002	%		**102**	**91.9**	**94.2**	**94.2**	**93.1**
13C4-PFOS	----	0.0002	%		**96.3**	**100**	**83.9**	**110**	**101**

Analytical Results

Sub-Matrix: SEDIMENT (Matrix: SOIL)				Sample ID	0021_SD030_250404	0021_SD031_250407	0021_SD035_250401	0021_SD036_250401	0021_SD037_250401
				Sampling date / time	04-Apr-2025 16:20	07-Apr-2025 08:35	01-Apr-2025 14:02	01-Apr-2025 12:51	01-Apr-2025 11:52
Compound	CAS Number	LOR	Unit		ES2510622-021	ES2510622-022	ES2510622-023	ES2510622-024	ES2510622-025
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	0.1	%		**47.6**	**20.5**	**20.8**	**20.0**	**31.2**
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	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		<0.0002	<0.0002	**0.0004**	<0.0002	**0.0004**
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	**0.0004**	<0.0002
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	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
Perfluoropentanoic acid (PFPeA)	2706-90-3	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
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
Perfluorododecanoic acid (PFDoDA)	307-55-1	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
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg		<0.001	<0.001	<0.001	<0.001	<0.001
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: SEDIMENT (Matrix: SOIL)				Sample ID	0021_SD030_250404	0021_SD031_250407	0021_SD035_250401	0021_SD036_250401	0021_SD037_250401
				Sampling date / time	04-Apr-2025 16:20	07-Apr-2025 08:35	01-Apr-2025 14:02	01-Apr-2025 12:51	01-Apr-2025 11:52
Compound	CAS Number	LOR	Unit		ES2510622-021	ES2510622-022	ES2510622-023	ES2510622-024	ES2510622-025
					Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	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-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	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-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
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
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
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
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 PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg		<0.0002	<0.0002	**0.0004**	**0.0004**	**0.0004**
Sum of PFAS (WA DER List)	----	0.0002	mg/kg		<0.0002	<0.0002	**0.0004**	**0.0004**	**0.0004**
Sum of PFAS	----	0.0002	mg/kg		<0.0002	<0.0002	**0.0004**	**0.0004**	**0.0004**
EP231S: PFAS Surrogate									
13C8-PFOA	----	0.0002	%		**91.0**	**103**	**102**	**102**	**96.2**
13C4-PFOS	----	0.0002	%		**97.6**	**107**	**103**	**107**	**112**

Analytical Results

Sub-Matrix: SEDIMENT (Matrix: SOIL)				Sample ID	0021_SD040_250403	0021_SD043_250403	0021_SD044_250401	0021_SD046_250401	0021_SD049_250404
				Sampling date / time	03-Apr-2025 15:39	03-Apr-2025 00:00	01-Apr-2025 13:42	01-Apr-2025 14:30	04-Apr-2025 14:41
Compound	CAS Number	LOR	Unit		ES2510622-026	ES2510622-027	ES2510622-028	ES2510622-029	ES2510622-030
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	0.1	%		**16.6**	**26.6**	**27.2**	**20.4**	**79.6**
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	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		**0.0023**	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg		**0.0018**	<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
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	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
Perfluoropentanoic acid (PFPeA)	2706-90-3	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
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
Perfluorododecanoic acid (PFDoDA)	307-55-1	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
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg		<0.001	<0.001	<0.001	<0.001	<0.001
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: SEDIMENT (Matrix: SOIL)				Sample ID	0021_SD040_250403	0021_SD043_250403	0021_SD044_250401	0021_SD046_250401	0021_SD049_250404
				Sampling date / time	03-Apr-2025 15:39	03-Apr-2025 00:00	01-Apr-2025 13:42	01-Apr-2025 14:30	04-Apr-2025 14:41
Compound	CAS Number	LOR	Unit		ES2510622-026	ES2510622-027	ES2510622-028	ES2510622-029	ES2510622-030
					Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	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-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	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-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
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
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
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
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 PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg		**0.0041**	<0.0002	<0.0002	<0.0002	<0.0002
Sum of PFAS (WA DER List)	----	0.0002	mg/kg		**0.0041**	<0.0002	<0.0002	<0.0002	**0.0002**
Sum of PFAS	----	0.0002	mg/kg		**0.0041**	<0.0002	<0.0002	<0.0002	**0.0002**
EP231S: PFAS Surrogate									
13C8-PFOA	----	0.0002	%		**90.8**	**96.2**	**93.6**	**100**	**107**
13C4-PFOS	----	0.0002	%		**85.8**	**99.2**	**114**	**106**	**94.8**

Analytical Results

Sub-Matrix: SEDIMENT (Matrix: SOIL)				Sample ID	0021_SD050_250401	0021_SD054_250402	0021_SD058_250401	0021_SD059_250401	0021_SD066_250402
				Sampling date / time	01-Apr-2025 09:26	02-Apr-2025 00:00	01-Apr-2025 08:55	01-Apr-2025 15:00	02-Apr-2025 09:55
Compound	CAS Number	LOR	Unit		ES2510622-031	ES2510622-032	ES2510622-033	ES2510622-034	ES2510622-035
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	0.1	%		**71.6**	**89.3**	**19.3**	**18.7**	**50.2**
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	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		**0.0013**	**0.0070**	<0.0002	<0.0002	**0.0004**
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
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	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	<0.0006	<0.0005	<0.0005	<0.0005
Perfluoropentanoic acid (PFPeA)	2706-90-3	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	**0.0004**	<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
Perfluorododecanoic acid (PFDoDA)	307-55-1	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
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg		<0.001	<0.001	<0.001	<0.001	<0.001
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: SEDIMENT (Matrix: SOIL)				Sample ID	0021_SD050_250401	0021_SD054_250402	0021_SD058_250401	0021_SD059_250401	0021_SD066_250402
				Sampling date / time	01-Apr-2025 09:26	02-Apr-2025 00:00	01-Apr-2025 08:55	01-Apr-2025 15:00	02-Apr-2025 09:55
Compound	CAS Number	LOR	Unit		ES2510622-031	ES2510622-032	ES2510622-033	ES2510622-034	ES2510622-035
					Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg		<0.0005	<0.0006	<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-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg		<0.0005	<0.0006	<0.0005	<0.0005	<0.0005
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg		<0.0005	<0.0006	<0.0005	<0.0005	<0.0005
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg		<0.0005	**0.0009**	<0.0005	<0.0005	<0.0005
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
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
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
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
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 PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg		**0.0013**	**0.0070**	<0.0002	<0.0002	**0.0004**
Sum of PFAS (WA DER List)	----	0.0002	mg/kg		**0.0013**	**0.0070**	<0.0002	<0.0002	**0.0004**
Sum of PFAS	----	0.0002	mg/kg		**0.0013**	**0.0083**	<0.0002	<0.0002	**0.0004**
EP231S: PFAS Surrogate									
13C8-PFOA	----	0.0002	%		**96.0**	**99.6**	**94.2**	**97.4**	**110**
13C4-PFOS	----	0.0002	%		**93.2**	**102**	**103**	**91.1**	**118**

Analytical Results

Sub-Matrix: SEDIMENT (Matrix: SOIL)			Sample ID	0021_SD067_250402	0021_SD068_250402	0021_SD069_250402	0021_SD070_250402	0021_SD073_250404
			Sampling date / time	02-Apr-2025 09:40	02-Apr-2025 09:30	02-Apr-2025 08:54	02-Apr-2025 08:22	04-Apr-2025 10:45
Compound	CAS Number	LOR	Unit	ES2510622-036	ES2510622-037	ES2510622-038	ES2510622-039	ES2510622-040
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	0.1	%	**60.3**	**48.3**	**68.5**	**85.5**	**24.4**
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	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	**0.0017**	**0.0006**	**0.0038**	**0.0107**	<0.0002
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	**0.0004**	<0.0002	**0.0003**	**0.0007**	<0.0002
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	**0.0003**	<0.0002	<0.0002
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	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	<0.0006	<0.0005
Perfluoropentanoic acid (PFPeA)	2706-90-3	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
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
Perfluorododecanoic acid (PFDoDA)	307-55-1	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
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	<0.001	<0.001	<0.001
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: SEDIMENT (Matrix: SOIL)				Sample ID	0021_SD067_250402	0021_SD068_250402	0021_SD069_250402	0021_SD070_250402	0021_SD073_250404
				Sampling date / time	02-Apr-2025 09:40	02-Apr-2025 09:30	02-Apr-2025 08:54	02-Apr-2025 08:22	04-Apr-2025 10:45
Compound	CAS Number	LOR	Unit		ES2510622-036	ES2510622-037	ES2510622-038	ES2510622-039	ES2510622-040
					Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0006	<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-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0006	<0.0005
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0006	<0.0005
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0006	<0.0005
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
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
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
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
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 PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg		**0.0021**	**0.0006**	**0.0041**	**0.0114**	<0.0002
Sum of PFAS (WA DER List)	----	0.0002	mg/kg		**0.0021**	**0.0006**	**0.0041**	**0.0114**	<0.0002
Sum of PFAS	----	0.0002	mg/kg		**0.0021**	**0.0006**	**0.0044**	**0.0114**	<0.0002
EP231S: PFAS Surrogate									
13C8-PFOA	----	0.0002	%		**109**	**105**	**108**	**110**	**107**
13C4-PFOS	----	0.0002	%		**112**	**107**	**110**	**109**	**111**

Analytical Results

Sub-Matrix: SEDIMENT (Matrix: SOIL)				Sample ID	0021_SD075_250401	0021_SD080_250404	0021_SD093_250404	0021_SD110_250402	0021_SD111_250401
				Sampling date / time	01-Apr-2025 10:40	04-Apr-2025 13:28	04-Apr-2025 16:25	02-Apr-2025 08:36	01-Apr-2025 12:19
Compound	CAS Number	LOR	Unit		ES2510622-041	ES2510622-042	ES2510622-043	ES2510622-044	ES2510622-045
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	0.1	%		**19.6**	**25.9**	**67.1**	**40.2**	**76.2**
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	**0.0004**
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	**0.0036**	**0.104**
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	**0.0004**	**0.0143**
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	**0.0016**
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	**0.0032**
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	**0.0002**
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	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
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	**0.0014**
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	**0.0006**
Perfluorononanoic acid (PFNA)	375-95-1	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	**0.0030**
Perfluoroheptanoic acid (PFHpA)	375-85-9	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
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg		<0.001	<0.001	<0.001	<0.001	**0.001**
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	**0.0016**

Analytical Results

Sub-Matrix: SEDIMENT (Matrix: SOIL)				Sample ID	0021_SD075_250401	0021_SD080_250404	0021_SD093_250404	0021_SD110_250402	0021_SD111_250401
				Sampling date / time	01-Apr-2025 10:40	04-Apr-2025 13:28	04-Apr-2025 16:25	02-Apr-2025 08:36	01-Apr-2025 12:19
Compound	CAS Number	LOR	Unit		ES2510622-041	ES2510622-042	ES2510622-043	ES2510622-044	ES2510622-045
					Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	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-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	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-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
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
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
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
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 PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	**0.0040**	**0.118**
Sum of PFAS (WA DER List)	----	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	**0.0040**	**0.125**
Sum of PFAS	----	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	**0.0040**	**0.132**
EP231S: PFAS Surrogate									
13C8-PFOA	----	0.0002	%		**108**	**109**	**96.1**	**107**	**106**
13C4-PFOS	----	0.0002	%		**103**	**95.3**	**116**	**97.4**	**102**

Analytical Results

Sub-Matrix: SEDIMENT (Matrix: SOIL)			Sample ID	0021_SD188_250403	0021_SD188_A_250403	----	----	----
			Sampling date / time	03-Apr-2025 08:09	03-Apr-2025 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2510622-046	ES2510622-047	--------	--------	--------
				Result	Result	----	----	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	0.1	%	**13.8**	**34.2**	----	----	----
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	<0.0002	----	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	----	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	<0.0002	----	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	----	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	----	----	----
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	----	----	----
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	----	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	----	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	----	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	----	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	----	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	----	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	----	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	----	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	----	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	----	----	----
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	----	----	----
EP231C: Perfluoroalkyl Sulfonamides								

Analytical Results

Sub-Matrix: SEDIMENT (Matrix: SOIL)				Sample ID	0021_SD188_250403	0021_SD188_A_250403	----	----	----
				Sampling date / time	03-Apr-2025 08:09	03-Apr-2025 00:00	----	----	----
Compound	CAS Number	LOR	Unit		ES2510622-046	ES2510622-047	--------	--------	--------
					Result	Result	----	----	----
EP231C: Perfluoroalkyl Sulfonamides - Continued									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg		<0.0002	<0.0002	----	----	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg		<0.0005	<0.0005	----	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg		<0.0002	<0.0002	----	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg		<0.0005	<0.0005	----	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg		<0.0005	<0.0005	----	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg		<0.0002	<0.0002	----	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg		<0.0005	<0.0005	----	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	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	----	----	----
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	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 PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg		<0.0002	<0.0002	----	----	----
Sum of PFAS (WA DER List)	----	0.0002	mg/kg		<0.0002	<0.0002	----	----	----
Sum of PFAS	----	0.0002	mg/kg		<0.0002	<0.0002	----	----	----
EP231S: PFAS Surrogate									
13C8-PFOA	----	0.0002	%		**110**	**108**	----	----	----
13C4-PFOS	----	0.0002	%		**105**	**100**	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_SW001_250403	0021_SW003_250403	0021_SW004_250402	0021_SW005_250402	0021_SW006_250402
				Sampling date / time	03-Apr-2025 13:52	03-Apr-2025 00:00	02-Apr-2025 08:30	02-Apr-2025 08:36	02-Apr-2025 08:52
Compound	CAS Number	LOR	Unit		ES2510622-048	ES2510622-049	ES2510622-050	ES2510622-051	ES2510622-052
					Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		**0.39**	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		**0.65**	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		**8.35**	**0.04**	<0.01	**0.03**	<0.01
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		**0.18**	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		**3.08**	**0.08**	<0.01	**0.03**	<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		**0.29**	<0.02	<0.02	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		**1.64**	<0.02	<0.02	<0.02	<0.02
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		**0.22**	<0.02	<0.02	<0.02	<0.02
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		**0.24**	<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_SW001_250403	0021_SW003_250403	0021_SW004_250402	0021_SW005_250402	0021_SW006_250402
				Sampling date / time	03-Apr-2025 13:52	03-Apr-2025 00:00	02-Apr-2025 08:30	02-Apr-2025 08:36	02-Apr-2025 08:52
Compound	CAS Number	LOR	Unit		ES2510622-048	ES2510622-049	ES2510622-050	ES2510622-051	ES2510622-052
					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		**15.2**	**0.12**	<0.01	**0.06**	<0.01
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		**11.4**	**0.12**	<0.01	**0.06**	<0.01
Sum of PFAS (WA DER List)	----	0.01	µg/L		**14.2**	**0.12**	<0.01	**0.06**	<0.01
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**94.0**	**95.4**	**94.5**	**98.1**	**101**
13C8-PFOA	----	0.02	%		**99.6**	**103**	**103**	**102**	**103**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_SW010_250404	0021_SW012_250331	0021_SW013_250401	0021_SW018_250402	0021_SW019_250403
				Sampling date / time	04-Apr-2025 16:13	31-Mar-2025 15:00	01-Apr-2025 16:00	02-Apr-2025 09:10	03-Apr-2025 14:20
Compound	CAS Number	LOR	Unit		ES2510622-053	ES2510622-054	ES2510622-055	ES2510622-056	ES2510622-057
					Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		**0.07**	**0.02**	<0.02	<0.02	**0.13**
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		**0.12**	**0.04**	<0.02	<0.02	**0.15**
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		**2.17**	**0.67**	**0.24**	**0.13**	**1.66**
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		**0.12**	**0.03**	<0.02	<0.02	**0.05**
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		**4.77**	**1.29**	**0.21**	**0.03**	**1.29**
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		**0.04**	<0.02	<0.02	<0.02	**0.11**
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		**0.19**	**0.08**	<0.02	<0.02	**0.30**
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		**0.10**	**0.02**	<0.01	<0.01	**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	0021_SW010_250404	0021_SW012_250331	0021_SW013_250401	0021_SW018_250402	0021_SW019_250403
				Sampling date / time	04-Apr-2025 16:13	31-Mar-2025 15:00	01-Apr-2025 16:00	02-Apr-2025 09:10	03-Apr-2025 14:20
Compound	CAS Number	LOR	Unit		ES2510622-053	ES2510622-054	ES2510622-055	ES2510622-056	ES2510622-057
					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		**7.62**	**2.15**	**0.45**	**0.16**	**3.87**
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		**6.94**	**1.96**	**0.45**	**0.16**	**2.95**
Sum of PFAS (WA DER List)	----	0.01	µg/L		**7.36**	**2.08**	**0.45**	**0.16**	**3.61**
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**95.2**	**97.7**	**90.8**	**89.3**	**95.4**
13C8-PFOA	----	0.02	%		**103**	**105**	**95.3**	**96.2**	**104**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_SW020_250402	0021_SW021_250402	0021_SW022_250403	0021_SW024_250403	0021_SW025_250404
				Sampling date / time	02-Apr-2025 09:52	02-Apr-2025 09:30	03-Apr-2025 16:05	03-Apr-2025 15:25	04-Apr-2025 15:33
Compound	CAS Number	LOR	Unit		ES2510622-058	ES2510622-059	ES2510622-060	ES2510622-061	ES2510622-062
					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	**0.03**	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		**0.16**	**0.34**	**0.23**	**0.03**	**0.08**
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		**0.09**	**0.17**	**0.16**	<0.01	**0.10**
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L		<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		<0.02	**0.05**	<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_SW020_250402	0021_SW021_250402	0021_SW022_250403	0021_SW024_250403	0021_SW025_250404
				Sampling date / time	02-Apr-2025 09:52	02-Apr-2025 09:30	03-Apr-2025 16:05	03-Apr-2025 15:25	04-Apr-2025 15:33
Compound	CAS Number	LOR	Unit		ES2510622-058	ES2510622-059	ES2510622-060	ES2510622-061	ES2510622-062
					Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
EP231P: PFAS Sums									
Sum of PFAS	----	0.01	µg/L		**0.25**	**0.61**	**0.39**	**0.03**	**0.18**
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		**0.25**	**0.51**	**0.39**	**0.03**	**0.18**
Sum of PFAS (WA DER List)	----	0.01	µg/L		**0.25**	**0.58**	**0.39**	**0.03**	**0.18**
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**98.4**	**96.2**	**91.5**	**93.4**	**89.9**
13C8-PFOA	----	0.02	%		**94.4**	**101**	**96.2**	**95.4**	**96.3**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_SW027_250401	0021_SW032_250404	0021_SW034_250404	0021_SW035_250403	0021_SW036_250404
				Sampling date / time	01-Apr-2025 14:05	04-Apr-2025 13:28	04-Apr-2025 13:45	03-Apr-2025 10:00	04-Apr-2025 16:20
Compound	CAS Number	LOR	Unit		ES2510622-063	ES2510622-064	ES2510622-065	ES2510622-066	ES2510622-067
					Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0005	µg/L		----	----	----	----	<0.0005
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0005	µg/L		----	----	----	----	<0.0005
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0005	µg/L		----	----	----	----	<0.0005
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0005	µg/L		----	----	----	----	<0.0005
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		**0.09**	<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	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0003	µg/L		----	----	----	----	**0.0009**
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		**0.14**	<0.01	<0.01	<0.01	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0005	µg/L		----	----	----	----	<0.0005
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	----
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.002	µg/L		----	----	----	----	<0.002
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L		<0.1	<0.1	<0.1	<0.1	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0005	µg/L		----	----	----	----	<0.0005
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0005	µg/L		----	----	----	----	<0.0005
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0005	µg/L		----	----	----	----	<0.0005
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_SW027_250401	0021_SW032_250404	0021_SW034_250404	0021_SW035_250403	0021_SW036_250404
				Sampling date / time	01-Apr-2025 14:05	04-Apr-2025 13:28	04-Apr-2025 13:45	03-Apr-2025 10:00	04-Apr-2025 16:20
Compound	CAS Number	LOR	Unit		ES2510622-063	ES2510622-064	ES2510622-065	ES2510622-066	ES2510622-067
					Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids - Continued									
Perfluorooctanoic acid (PFOA)	335-67-1	0.0005	µg/L		----	----	----	----	<0.0005
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		<0.01	<0.01	<0.01	<0.01	----
Perfluorononanoic acid (PFNA)	375-95-1	0.0005	µg/L		----	----	----	----	<0.0005
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.0005	µg/L		----	----	----	----	<0.0005
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0005	µg/L		----	----	----	----	<0.0005
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0005	µg/L		----	----	----	----	<0.0005
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0005	µg/L		----	----	----	----	<0.0005
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	µg/L		----	----	----	----	<0.0005
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	----
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0005	µg/L		----	----	----	----	<0.0005
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.001	µg/L		----	----	----	----	<0.001
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.001	µg/L		----	----	----	----	<0.001

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_SW027_250401	0021_SW032_250404	0021_SW034_250404	0021_SW035_250403	0021_SW036_250404
				Sampling date / time	01-Apr-2025 14:05	04-Apr-2025 13:28	04-Apr-2025 13:45	03-Apr-2025 10:00	04-Apr-2025 16:20
Compound	CAS Number	LOR	Unit		ES2510622-063	ES2510622-064	ES2510622-065	ES2510622-066	ES2510622-067
					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	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.001	µg/L		----	----	----	----	<0.001
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.001	µg/L		----	----	----	----	<0.001
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0005	µg/L		----	----	----	----	<0.0005
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0005	µg/L		----	----	----	----	<0.0005
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L		<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	0.001	µg/L		----	----	----	----	<0.001
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.001	µg/L		----	----	----	----	<0.001
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.001	µg/L		----	----	----	----	<0.001
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_SW027_250401	0021_SW032_250404	0021_SW034_250404	0021_SW035_250403	0021_SW036_250404
				Sampling date / time	01-Apr-2025 14:05	04-Apr-2025 13:28	04-Apr-2025 13:45	03-Apr-2025 10:00	04-Apr-2025 16:20
Compound	CAS Number	LOR	Unit		ES2510622-063	ES2510622-064	ES2510622-065	ES2510622-066	ES2510622-067
					Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued									
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.001	µg/L		----	----	----	----	<0.001
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	----
EP231P: PFAS Sums									
Sum of PFAS	----	0.0003	µg/L		----	----	----	----	**0.0009**
Sum of PFAS	----	0.01	µg/L		**0.23**	<0.01	<0.01	<0.01	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0003	µg/L		----	----	----	----	**0.0009**
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		**0.23**	<0.01	<0.01	<0.01	----
Sum of PFAS (WA DER List)	----	0.0003	µg/L		----	----	----	----	**0.0009**
Sum of PFAS (WA DER List)	----	0.01	µg/L		**0.23**	<0.01	<0.01	<0.01	----
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0005	%		----	----	----	----	**103**
13C4-PFOS	----	0.02	%		**93.0**	**96.7**	**89.8**	**103**	----
13C8-PFOA	----	0.0005	%		----	----	----	----	**109**
13C8-PFOA	----	0.02	%		**98.0**	**95.8**	**99.3**	**94.3**	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_SW037_250407	0021_SW040_250404	0021_SW043_250401	0021_SW044_250401	0021_SW045_250401
				Sampling date / time	07-Apr-2025 08:36	04-Apr-2025 16:25	01-Apr-2025 14:02	01-Apr-2025 12:51	01-Apr-2025 11:52
Compound	CAS Number	LOR	Unit		ES2510622-068	ES2510622-069	ES2510622-070	ES2510622-071	ES2510622-072
					Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0005	µg/L		<0.0005	<0.0005	----	----	----
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		----	----	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0005	µg/L		<0.0005	<0.0005	----	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0005	µg/L		<0.0005	<0.0005	----	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		----	----	**0.03**	**0.04**	<0.02
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0005	µg/L		<0.0005	<0.0005	----	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		----	----	**0.59**	**0.62**	**0.02**
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		----	----	**0.03**	**0.03**	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0003	µg/L		**0.0007**	**0.0007**	----	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		----	----	**0.99**	**1.02**	**0.02**
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0005	µg/L		<0.0005	<0.0005	----	----	----
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	0.002	µg/L		<0.002	<0.002	----	----	----
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L		----	----	<0.1	<0.1	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0005	µg/L		<0.0005	<0.0005	----	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		----	----	<0.02	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0005	µg/L		<0.0005	<0.0005	----	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		----	----	**0.03**	**0.03**	<0.02
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0005	µg/L		<0.0005	<0.0005	----	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		----	----	<0.02	<0.02	<0.02

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_SW037_250407	0021_SW040_250404	0021_SW043_250401	0021_SW044_250401	0021_SW045_250401
				Sampling date / time	07-Apr-2025 08:36	04-Apr-2025 16:25	01-Apr-2025 14:02	01-Apr-2025 12:51	01-Apr-2025 11:52
Compound	CAS Number	LOR	Unit		ES2510622-068	ES2510622-069	ES2510622-070	ES2510622-071	ES2510622-072
					Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids - Continued									
Perfluorooctanoic acid (PFOA)	335-67-1	0.0005	µg/L		<0.0005	<0.0005	----	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		----	----	**0.02**	**0.02**	<0.01
Perfluorononanoic acid (PFNA)	375-95-1	0.0005	µg/L		<0.0005	<0.0005	----	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L		----	----	<0.02	<0.02	<0.02
Perfluorodecanoic acid (PFDA)	335-76-2	0.0005	µg/L		<0.0005	<0.0005	----	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L		----	----	<0.02	<0.02	<0.02
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0005	µg/L		<0.0005	<0.0005	----	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L		----	----	<0.02	<0.02	<0.02
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0005	µg/L		<0.0005	<0.0005	----	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L		----	----	<0.02	<0.02	<0.02
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0005	µg/L		<0.0005	<0.0005	----	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L		----	----	<0.02	<0.02	<0.02
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	µg/L		<0.0005	<0.0005	----	----	----
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	0.0005	µg/L		<0.0005	<0.0005	----	----	----
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L		----	----	<0.02	<0.02	<0.02
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.001	µg/L		<0.001	<0.001	----	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L		----	----	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.001	µg/L		<0.001	<0.001	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_SW037_250407	0021_SW040_250404	0021_SW043_250401	0021_SW044_250401	0021_SW045_250401
				Sampling date / time	07-Apr-2025 08:36	04-Apr-2025 16:25	01-Apr-2025 14:02	01-Apr-2025 12:51	01-Apr-2025 11:52
Compound	CAS Number	LOR	Unit		ES2510622-068	ES2510622-069	ES2510622-070	ES2510622-071	ES2510622-072
					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
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.001	µg/L		<0.001	<0.001	----	----	----
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	0.001	µg/L		<0.001	<0.001	----	----	----
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	0.0005	µg/L		<0.0005	<0.0005	----	----	----
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	0.0005	µg/L		<0.0005	<0.0005	----	----	----
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	0.001	µg/L		<0.001	<0.001	----	----	----
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	0.001	µg/L		<0.001	<0.001	----	----	----
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	0.001	µg/L		<0.001	<0.001	----	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L		----	----	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_SW037_250407	0021_SW040_250404	0021_SW043_250401	0021_SW044_250401	0021_SW045_250401
				Sampling date / time	07-Apr-2025 08:36	04-Apr-2025 16:25	01-Apr-2025 14:02	01-Apr-2025 12:51	01-Apr-2025 11:52
Compound	CAS Number	LOR	Unit		ES2510622-068	ES2510622-069	ES2510622-070	ES2510622-071	ES2510622-072
					Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued									
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.001	µg/L		<0.001	<0.001	----	----	----
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	----	0.0003	µg/L		**0.0007**	**0.0007**	----	----	----
Sum of PFAS	----	0.01	µg/L		----	----	**1.69**	**1.76**	**0.04**
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0003	µg/L		**0.0007**	**0.0007**	----	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		----	----	**1.58**	**1.64**	**0.04**
Sum of PFAS (WA DER List)	----	0.0003	µg/L		**0.0007**	**0.0007**	----	----	----
Sum of PFAS (WA DER List)	----	0.01	µg/L		----	----	**1.63**	**1.69**	**0.04**
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0005	%		**98.9**	**96.2**	----	----	----
13C4-PFOS	----	0.02	%		----	----	**94.7**	**86.4**	**95.8**
13C8-PFOA	----	0.0005	%		**109**	**118**	----	----	----
13C8-PFOA	----	0.02	%		----	----	**99.0**	**94.5**	**96.6**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_SW048_250403	0021_SW051_250403	0021_SW052_250401	0021_SW053_250401	0021_SW056_250401
				Sampling date / time	03-Apr-2025 15:39	03-Apr-2025 00:00	01-Apr-2025 13:42	01-Apr-2025 12:19	01-Apr-2025 14:30
Compound	CAS Number	LOR	Unit		ES2510622-073	ES2510622-074	ES2510622-075	ES2510622-076	ES2510622-077
					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	**0.03**	**0.04**	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		**0.03**	<0.01	**0.57**	**0.85**	<0.01
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		<0.02	<0.02	**0.03**	**0.05**	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		**0.01**	<0.01	**1.04**	**1.29**	<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	**0.03**	**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**	**0.03**	<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_SW048_250403	0021_SW051_250403	0021_SW052_250401	0021_SW053_250401	0021_SW056_250401
				Sampling date / time	03-Apr-2025 15:39	03-Apr-2025 00:00	01-Apr-2025 13:42	01-Apr-2025 12:19	01-Apr-2025 14:30
Compound	CAS Number	LOR	Unit		ES2510622-073	ES2510622-074	ES2510622-075	ES2510622-076	ES2510622-077
					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		**0.04**	<0.01	**1.74**	**2.32**	<0.01
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		**0.04**	<0.01	**1.61**	**2.14**	<0.01
Sum of PFAS (WA DER List)	----	0.01	µg/L		**0.04**	<0.01	**1.68**	**2.23**	<0.01
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**93.4**	**93.8**	**97.0**	**95.6**	**101**
13C8-PFOA	----	0.02	%		**94.7**	**97.8**	**99.6**	**99.0**	**95.7**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_SW057_250401	0021_SW058_250401	0021_SW059_250404	----	----
				Sampling date / time	01-Apr-2025 00:00	01-Apr-2025 12:30	04-Apr-2025 14:41	----	----
Compound	CAS Number	LOR	Unit		ES2510622-078	ES2510622-079	ES2510622-080	--------	--------
					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_SW057_250401	0021_SW058_250401	0021_SW059_250404	----	----
				Sampling date / time	01-Apr-2025 00:00	01-Apr-2025 12:30	04-Apr-2025 14:41	----	----
Compound	CAS Number	LOR	Unit		ES2510622-078	ES2510622-079	ES2510622-080	--------	--------
					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	%		**98.1**	**95.4**	**97.3**	----	----
13C8-PFOA	----	0.02	%		**93.7**	**95.3**	**96.2**	----	----

Surrogate Control Limits

Sub-Matrix: SEDIMENT		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP231S: PFAS Surrogate			
13C8-PFOA	----	60	120
13C4-PFOS	----	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	: **ES2510622**	Page	: 1 of 15
Amendment	: **2**		
Client	: **GHD PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MS HELEN MILNE	Telephone	: +61-2-8784 8555
Project	: 12626622	Date Samples Received	: 08-Apr-2025
Site	: ----	Issue Date	: 29-Apr-2025
Sampler	: Jarrad Mawbey	No. of samples received	: 80
Order number	: 12626622	No. of samples analysed	: 80

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

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

Summary of Outliers

Outliers : Quality Control Samples

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

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

Outliers : Analysis Holding Time Compliance

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

Outliers : Frequency of Quality Control Samples

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

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **WATER**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Matrix Spike (MS) Recoveries							
EP231A: Perfluoroalkyl Sulfonic Acids	ES2510623--015	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	ES2510623--015	Anonymous	**Perfluorooctane sulfonic acid (PFOS)**	1763-23-1	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**

Analysis Holding Time Compliance

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

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

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

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

Matrix: **SOIL**

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
EA055: Moisture Content (Dried @ 105-110°C)							
HDPE Soil Jar (EA055) 0021_SD009_250401, 0021_SD011_250401, 0021_SD023_250401, 0021_SD035_250401, 0021_SD036_250401, 0021_SD037_250401, 0021_SD044_250401, 0021_SD046_250401, 0021_SD050_250401, 0021_SD058_250401, 0021_SD059_250401, 0021_SD075_250401, 0021_SD111_250401	**01-Apr-2025**	**----**	----	**----**	**15-Apr-2025**	15-Apr-2025	✓
HDPE Soil Jar (EA055) 0021_SD004_250402, 0021_SD005_250402, 0021_SD012_250402, 0021_SD013_250402, 0021_SD014_250402, 0021_SD016_250402, 0021_SD017_250402, 0021_SD054_250402, 0021_SD066_250402, 0021_SD067_250402, 0021_SD068_250402, 0021_SD069_250402, 0021_SD070_250402, 0021_SD110_250402	**02-Apr-2025**	**----**	----	**----**	**15-Apr-2025**	16-Apr-2025	✓
HDPE Soil Jar (EA055)							

Matrix: **SOIL**

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
EA055: Moisture Content (Dried @ 105-110°C) - Continued							
0021_SD001_250403, 0021_SD002_250403, 0021_SD003_250403, 0021_SD015_250403, 0021_SD018_250403, 0021_SD020_250403, 0021_SD029_250403, 0021_SD040_250403, 0021_SD043_250403, 0021_SD188_250403, 0021_SD188_A_250403	**03-Apr-2025**	**----**	----	**----**	**15-Apr-2025**	17-Apr-2025	✓
HDPE Soil Jar (EA055) 0021_SD006_250404, 0021_SD021_250404, 0021_SD028_250404, 0021_SD030_250404, 0021_SD049_250404, 0021_SD073_250404, 0021_SD080_250404, 0021_SD093_250404	**04-Apr-2025**	**----**	----	**----**	**15-Apr-2025**	18-Apr-2025	✓
HDPE Soil Jar (EA055) 0021_SD031_250407	**07-Apr-2025**	**----**	----	**----**	**15-Apr-2025**	21-Apr-2025	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231A: Perfluoroalkyl Sulfonic Acids							
HDPE Soil Jar (EP231X-SD) 0021_SD075_250401, 0021_SD111_250401	**01-Apr-2025**	**15-Apr-2025**	28-Sep-2025	✓	**16-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD023_250401, 0021_SD035_250401, 0021_SD036_250401, 0021_SD037_250401, 0021_SD044_250401, 0021_SD046_250401, 0021_SD050_250401, 0021_SD058_250401, 0021_SD059_250401	**01-Apr-2025**	**15-Apr-2025**	28-Sep-2025	✓	**17-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD009_250401, 0021_SD011_250401	**01-Apr-2025**	**15-Apr-2025**	28-Sep-2025	✓	**22-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD066_250402, 0021_SD067_250402, 0021_SD068_250402, 0021_SD069_250402, 0021_SD070_250402, 0021_SD110_250402	**02-Apr-2025**	**15-Apr-2025**	29-Sep-2025	✓	**16-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD054_250402	**02-Apr-2025**	**15-Apr-2025**	29-Sep-2025	✓	**17-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD004_250402, 0021_SD005_250402, 0021_SD012_250402, 0021_SD013_250402, 0021_SD014_250402, 0021_SD016_250402, 0021_SD017_250402	**02-Apr-2025**	**15-Apr-2025**	29-Sep-2025	✓	**22-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD188_250403, 0021_SD188_A_250403	**03-Apr-2025**	**15-Apr-2025**	30-Sep-2025	✓	**16-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD020_250403, 0021_SD029_250403, 0021_SD040_250403, 0021_SD043_250403	**03-Apr-2025**	**15-Apr-2025**	30-Sep-2025	✓	**17-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD001_250403, 0021_SD002_250403, 0021_SD003_250403, 0021_SD015_250403, 0021_SD018_250403	**03-Apr-2025**	**15-Apr-2025**	30-Sep-2025	✓	**22-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD073_250404, 0021_SD080_250404, 0021_SD093_250404	**04-Apr-2025**	**15-Apr-2025**	01-Oct-2025	✓	**16-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD021_250404, 0021_SD028_250404, 0021_SD030_250404, 0021_SD049_250404	**04-Apr-2025**	**15-Apr-2025**	01-Oct-2025	✓	**17-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD006_250404	**04-Apr-2025**	**15-Apr-2025**	01-Oct-2025	✓	**22-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD031_250407	**07-Apr-2025**	**15-Apr-2025**	04-Oct-2025	✓	**17-Apr-2025**	25-May-2025	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE Soil Jar (EP231X-SD) 0021_SD075_250401, 0021_SD111_250401	**01-Apr-2025**	**15-Apr-2025**	28-Sep-2025	✓	**16-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD023_250401, 0021_SD035_250401, 0021_SD036_250401, 0021_SD037_250401, 0021_SD044_250401, 0021_SD046_250401, 0021_SD050_250401, 0021_SD058_250401, 0021_SD059_250401	**01-Apr-2025**	**15-Apr-2025**	28-Sep-2025	✓	**17-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD009_250401, 0021_SD011_250401	**01-Apr-2025**	**15-Apr-2025**	28-Sep-2025	✓	**22-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD066_250402, 0021_SD067_250402, 0021_SD068_250402, 0021_SD069_250402, 0021_SD070_250402, 0021_SD110_250402	**02-Apr-2025**	**15-Apr-2025**	29-Sep-2025	✓	**16-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD054_250402	**02-Apr-2025**	**15-Apr-2025**	29-Sep-2025	✓	**17-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD004_250402, 0021_SD005_250402, 0021_SD012_250402, 0021_SD013_250402, 0021_SD014_250402, 0021_SD016_250402, 0021_SD017_250402	**02-Apr-2025**	**15-Apr-2025**	29-Sep-2025	✓	**22-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD188_250403, 0021_SD188_A_250403	**03-Apr-2025**	**15-Apr-2025**	30-Sep-2025	✓	**16-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD020_250403, 0021_SD029_250403, 0021_SD040_250403, 0021_SD043_250403	**03-Apr-2025**	**15-Apr-2025**	30-Sep-2025	✓	**17-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD001_250403, 0021_SD002_250403, 0021_SD003_250403, 0021_SD015_250403, 0021_SD018_250403	**03-Apr-2025**	**15-Apr-2025**	30-Sep-2025	✓	**22-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD073_250404, 0021_SD080_250404, 0021_SD093_250404	**04-Apr-2025**	**15-Apr-2025**	01-Oct-2025	✓	**16-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD021_250404, 0021_SD028_250404, 0021_SD030_250404, 0021_SD049_250404	**04-Apr-2025**	**15-Apr-2025**	01-Oct-2025	✓	**17-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD006_250404	**04-Apr-2025**	**15-Apr-2025**	01-Oct-2025	✓	**22-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD031_250407	**07-Apr-2025**	**15-Apr-2025**	04-Oct-2025	✓	**17-Apr-2025**	25-May-2025	✓

Matrix: **SOIL**

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
EP231C: Perfluoroalkyl Sulfonamides							
HDPE Soil Jar (EP231X-SD) 0021_SD075_250401, 0021_SD111_250401	**01-Apr-2025**	**15-Apr-2025**	28-Sep-2025	✓	**16-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD023_250401, 0021_SD035_250401, 0021_SD036_250401, 0021_SD037_250401, 0021_SD044_250401, 0021_SD046_250401, 0021_SD050_250401, 0021_SD058_250401, 0021_SD059_250401	**01-Apr-2025**	**15-Apr-2025**	28-Sep-2025	✓	**17-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD009_250401, 0021_SD011_250401	**01-Apr-2025**	**15-Apr-2025**	28-Sep-2025	✓	**22-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD066_250402, 0021_SD067_250402, 0021_SD068_250402, 0021_SD069_250402, 0021_SD070_250402, 0021_SD110_250402	**02-Apr-2025**	**15-Apr-2025**	29-Sep-2025	✓	**16-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD054_250402	**02-Apr-2025**	**15-Apr-2025**	29-Sep-2025	✓	**17-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD004_250402, 0021_SD005_250402, 0021_SD012_250402, 0021_SD013_250402, 0021_SD014_250402, 0021_SD016_250402, 0021_SD017_250402	**02-Apr-2025**	**15-Apr-2025**	29-Sep-2025	✓	**22-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD188_250403, 0021_SD188_A_250403	**03-Apr-2025**	**15-Apr-2025**	30-Sep-2025	✓	**16-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD020_250403, 0021_SD029_250403, 0021_SD040_250403, 0021_SD043_250403	**03-Apr-2025**	**15-Apr-2025**	30-Sep-2025	✓	**17-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD001_250403, 0021_SD002_250403, 0021_SD003_250403, 0021_SD015_250403, 0021_SD018_250403	**03-Apr-2025**	**15-Apr-2025**	30-Sep-2025	✓	**22-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD073_250404, 0021_SD080_250404, 0021_SD093_250404	**04-Apr-2025**	**15-Apr-2025**	01-Oct-2025	✓	**16-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD021_250404, 0021_SD028_250404, 0021_SD030_250404, 0021_SD049_250404	**04-Apr-2025**	**15-Apr-2025**	01-Oct-2025	✓	**17-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD006_250404	**04-Apr-2025**	**15-Apr-2025**	01-Oct-2025	✓	**22-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD031_250407	**07-Apr-2025**	**15-Apr-2025**	04-Oct-2025	✓	**17-Apr-2025**	25-May-2025	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE Soil Jar (EP231X-SD)							
0021_SD075_250401, 0021_SD111_250401	**01-Apr-2025**	**15-Apr-2025**	28-Sep-2025	✓	**16-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD)							
0021_SD023_250401, 0021_SD035_250401, 0021_SD036_250401, 0021_SD037_250401, 0021_SD044_250401, 0021_SD046_250401, 0021_SD050_250401, 0021_SD058_250401, 0021_SD059_250401	**01-Apr-2025**	**15-Apr-2025**	28-Sep-2025	✓	**17-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD)							
0021_SD009_250401, 0021_SD011_250401	**01-Apr-2025**	**15-Apr-2025**	28-Sep-2025	✓	**22-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD)							
0021_SD066_250402, 0021_SD067_250402, 0021_SD068_250402, 0021_SD069_250402, 0021_SD070_250402, 0021_SD110_250402	**02-Apr-2025**	**15-Apr-2025**	29-Sep-2025	✓	**16-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD)							
0021_SD054_250402	**02-Apr-2025**	**15-Apr-2025**	29-Sep-2025	✓	**17-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD)							
0021_SD004_250402, 0021_SD005_250402, 0021_SD012_250402, 0021_SD013_250402, 0021_SD014_250402, 0021_SD016_250402, 0021_SD017_250402	**02-Apr-2025**	**15-Apr-2025**	29-Sep-2025	✓	**22-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD)							
0021_SD188_250403, 0021_SD188_A_250403	**03-Apr-2025**	**15-Apr-2025**	30-Sep-2025	✓	**16-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD)							
0021_SD020_250403, 0021_SD029_250403, 0021_SD040_250403, 0021_SD043_250403	**03-Apr-2025**	**15-Apr-2025**	30-Sep-2025	✓	**17-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD)							
0021_SD001_250403, 0021_SD002_250403, 0021_SD003_250403, 0021_SD015_250403, 0021_SD018_250403	**03-Apr-2025**	**15-Apr-2025**	30-Sep-2025	✓	**22-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD)							
0021_SD073_250404, 0021_SD080_250404, 0021_SD093_250404	**04-Apr-2025**	**15-Apr-2025**	01-Oct-2025	✓	**16-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD)							
0021_SD021_250404, 0021_SD028_250404, 0021_SD030_250404, 0021_SD049_250404	**04-Apr-2025**	**15-Apr-2025**	01-Oct-2025	✓	**17-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD)							
0021_SD006_250404	**04-Apr-2025**	**15-Apr-2025**	01-Oct-2025	✓	**22-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD)							
0021_SD031_250407	**07-Apr-2025**	**15-Apr-2025**	04-Oct-2025	✓	**17-Apr-2025**	25-May-2025	✓

Matrix: **SOIL**

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
EP231P: PFAS Sums							
HDPE Soil Jar (EP231X-SD) 0021_SD075_250401, 0021_SD111_250401	**01-Apr-2025**	**15-Apr-2025**	28-Sep-2025	✓	**16-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD023_250401, 0021_SD035_250401, 0021_SD036_250401, 0021_SD037_250401, 0021_SD044_250401, 0021_SD046_250401, 0021_SD050_250401, 0021_SD058_250401, 0021_SD059_250401	**01-Apr-2025**	**15-Apr-2025**	28-Sep-2025	✓	**17-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD009_250401, 0021_SD011_250401	**01-Apr-2025**	**15-Apr-2025**	28-Sep-2025	✓	**22-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD066_250402, 0021_SD067_250402, 0021_SD068_250402, 0021_SD069_250402, 0021_SD070_250402, 0021_SD110_250402	**02-Apr-2025**	**15-Apr-2025**	29-Sep-2025	✓	**16-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD054_250402	**02-Apr-2025**	**15-Apr-2025**	29-Sep-2025	✓	**17-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD004_250402, 0021_SD005_250402, 0021_SD012_250402, 0021_SD013_250402, 0021_SD014_250402, 0021_SD016_250402, 0021_SD017_250402	**02-Apr-2025**	**15-Apr-2025**	29-Sep-2025	✓	**22-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD188_250403, 0021_SD188_A_250403	**03-Apr-2025**	**15-Apr-2025**	30-Sep-2025	✓	**16-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD020_250403, 0021_SD029_250403, 0021_SD040_250403, 0021_SD043_250403	**03-Apr-2025**	**15-Apr-2025**	30-Sep-2025	✓	**17-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD001_250403, 0021_SD002_250403, 0021_SD003_250403, 0021_SD015_250403, 0021_SD018_250403	**03-Apr-2025**	**15-Apr-2025**	30-Sep-2025	✓	**22-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD073_250404, 0021_SD080_250404, 0021_SD093_250404	**04-Apr-2025**	**15-Apr-2025**	01-Oct-2025	✓	**16-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD021_250404, 0021_SD028_250404, 0021_SD030_250404, 0021_SD049_250404	**04-Apr-2025**	**15-Apr-2025**	01-Oct-2025	✓	**17-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD006_250404	**04-Apr-2025**	**15-Apr-2025**	01-Oct-2025	✓	**22-Apr-2025**	25-May-2025	✓
HDPE Soil Jar (EP231X-SD) 0021_SD031_250407	**07-Apr-2025**	**15-Apr-2025**	04-Oct-2025	✓	**17-Apr-2025**	25-May-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 / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231A: Perfluoroalkyl Sulfonic Acids							
HDPE (no PTFE) (EP231X) 0021_SW013_250401, 0021_SW027_250401, 0021_SW043_250401, 0021_SW044_250401, 0021_SW045_250401, 0021_SW052_250401, 0021_SW053_250401	**01-Apr-2025**	**15-Apr-2025**	28-Sep-2025	✓	**17-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0021_SW056_250401, 0021_SW057_250401, 0021_SW058_250401	**01-Apr-2025**	**15-Apr-2025**	28-Sep-2025	✓	**22-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0021_SW004_250402, 0021_SW005_250402, 0021_SW006_250402, 0021_SW018_250402, 0021_SW020_250402, 0021_SW021_250402	**02-Apr-2025**	**15-Apr-2025**	29-Sep-2025	✓	**17-Apr-2025**	29-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0021_SW001_250403, 0021_SW003_250403, 0021_SW019_250403, 0021_SW022_250403, 0021_SW024_250403, 0021_SW035_250403, 0021_SW048_250403, 0021_SW051_250403	**03-Apr-2025**	**15-Apr-2025**	30-Sep-2025	✓	**17-Apr-2025**	30-Sep-2025	✓
HDPE (no PTFE) (EP231X-ST) 0021_SW036_250404, 0021_SW040_250404	**04-Apr-2025**	**14-Apr-2025**	01-Oct-2025	✓	**16-Apr-2025**	01-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0021_SW010_250404, 0021_SW025_250404, 0021_SW032_250404, 0021_SW034_250404	**04-Apr-2025**	**15-Apr-2025**	01-Oct-2025	✓	**17-Apr-2025**	01-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0021_SW059_250404	**04-Apr-2025**	**15-Apr-2025**	01-Oct-2025	✓	**22-Apr-2025**	01-Oct-2025	✓
HDPE (no PTFE) (EP231X-ST) 0021_SW037_250407	**07-Apr-2025**	**14-Apr-2025**	04-Oct-2025	✓	**16-Apr-2025**	04-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0021_SW012_250331	**31-Mar-2025**	**15-Apr-2025**	27-Sep-2025	✓	**17-Apr-2025**	27-Sep-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
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE (no PTFE) (EP231X)							
0021_SW013_250401, 0021_SW027_250401, 0021_SW043_250401, 0021_SW044_250401, 0021_SW045_250401, 0021_SW052_250401, 0021_SW053_250401	**01-Apr-2025**	**15-Apr-2025**	28-Sep-2025	✓	**17-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X)							
0021_SW056_250401, 0021_SW057_250401, 0021_SW058_250401	**01-Apr-2025**	**15-Apr-2025**	28-Sep-2025	✓	**22-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X)							
0021_SW004_250402, 0021_SW005_250402, 0021_SW006_250402, 0021_SW018_250402, 0021_SW020_250402, 0021_SW021_250402	**02-Apr-2025**	**15-Apr-2025**	29-Sep-2025	✓	**17-Apr-2025**	29-Sep-2025	✓
HDPE (no PTFE) (EP231X)							
0021_SW001_250403, 0021_SW003_250403, 0021_SW019_250403, 0021_SW022_250403, 0021_SW024_250403, 0021_SW035_250403, 0021_SW048_250403, 0021_SW051_250403	**03-Apr-2025**	**15-Apr-2025**	30-Sep-2025	✓	**17-Apr-2025**	30-Sep-2025	✓
HDPE (no PTFE) (EP231X-ST)							
0021_SW036_250404, 0021_SW040_250404	**04-Apr-2025**	**14-Apr-2025**	01-Oct-2025	✓	**16-Apr-2025**	01-Oct-2025	✓
HDPE (no PTFE) (EP231X)							
0021_SW010_250404, 0021_SW025_250404, 0021_SW032_250404, 0021_SW034_250404	**04-Apr-2025**	**15-Apr-2025**	01-Oct-2025	✓	**17-Apr-2025**	01-Oct-2025	✓
HDPE (no PTFE) (EP231X)							
0021_SW059_250404	**04-Apr-2025**	**15-Apr-2025**	01-Oct-2025	✓	**22-Apr-2025**	01-Oct-2025	✓
HDPE (no PTFE) (EP231X-ST)							
0021_SW037_250407	**07-Apr-2025**	**14-Apr-2025**	04-Oct-2025	✓	**16-Apr-2025**	04-Oct-2025	✓
HDPE (no PTFE) (EP231X)							
0021_SW012_250331	**31-Mar-2025**	**15-Apr-2025**	27-Sep-2025	✓	**17-Apr-2025**	27-Sep-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
EP231C: Perfluoroalkyl Sulfonamides							
HDPE (no PTFE) (EP231X) 0021_SW013_250401, 0021_SW027_250401, 0021_SW043_250401, 0021_SW044_250401, 0021_SW045_250401, 0021_SW052_250401, 0021_SW053_250401	**01-Apr-2025**	**15-Apr-2025**	28-Sep-2025	✓	**17-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0021_SW056_250401, 0021_SW057_250401, 0021_SW058_250401	**01-Apr-2025**	**15-Apr-2025**	28-Sep-2025	✓	**22-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0021_SW004_250402, 0021_SW005_250402, 0021_SW006_250402, 0021_SW018_250402, 0021_SW020_250402, 0021_SW021_250402	**02-Apr-2025**	**15-Apr-2025**	29-Sep-2025	✓	**17-Apr-2025**	29-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0021_SW001_250403, 0021_SW003_250403, 0021_SW019_250403, 0021_SW022_250403, 0021_SW024_250403, 0021_SW035_250403, 0021_SW048_250403, 0021_SW051_250403	**03-Apr-2025**	**15-Apr-2025**	30-Sep-2025	✓	**17-Apr-2025**	30-Sep-2025	✓
HDPE (no PTFE) (EP231X-ST) 0021_SW036_250404, 0021_SW040_250404	**04-Apr-2025**	**14-Apr-2025**	01-Oct-2025	✓	**16-Apr-2025**	01-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0021_SW010_250404, 0021_SW025_250404, 0021_SW032_250404, 0021_SW034_250404	**04-Apr-2025**	**15-Apr-2025**	01-Oct-2025	✓	**17-Apr-2025**	01-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0021_SW059_250404	**04-Apr-2025**	**15-Apr-2025**	01-Oct-2025	✓	**22-Apr-2025**	01-Oct-2025	✓
HDPE (no PTFE) (EP231X-ST) 0021_SW037_250407	**07-Apr-2025**	**14-Apr-2025**	04-Oct-2025	✓	**16-Apr-2025**	04-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0021_SW012_250331	**31-Mar-2025**	**15-Apr-2025**	27-Sep-2025	✓	**17-Apr-2025**	27-Sep-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
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE (no PTFE) (EP231X) 0021_SW013_250401, 0021_SW027_250401, 0021_SW043_250401, 0021_SW044_250401, 0021_SW045_250401, 0021_SW052_250401, 0021_SW053_250401	**01-Apr-2025**	**15-Apr-2025**	28-Sep-2025	✓	**17-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0021_SW056_250401, 0021_SW057_250401, 0021_SW058_250401	**01-Apr-2025**	**15-Apr-2025**	28-Sep-2025	✓	**22-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0021_SW004_250402, 0021_SW005_250402, 0021_SW006_250402, 0021_SW018_250402, 0021_SW020_250402, 0021_SW021_250402	**02-Apr-2025**	**15-Apr-2025**	29-Sep-2025	✓	**17-Apr-2025**	29-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0021_SW001_250403, 0021_SW003_250403, 0021_SW019_250403, 0021_SW022_250403, 0021_SW024_250403, 0021_SW035_250403, 0021_SW048_250403, 0021_SW051_250403	**03-Apr-2025**	**15-Apr-2025**	30-Sep-2025	✓	**17-Apr-2025**	30-Sep-2025	✓
HDPE (no PTFE) (EP231X-ST) 0021_SW036_250404, 0021_SW040_250404	**04-Apr-2025**	**14-Apr-2025**	01-Oct-2025	✓	**16-Apr-2025**	01-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0021_SW010_250404, 0021_SW025_250404, 0021_SW032_250404, 0021_SW034_250404	**04-Apr-2025**	**15-Apr-2025**	01-Oct-2025	✓	**17-Apr-2025**	01-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0021_SW059_250404	**04-Apr-2025**	**15-Apr-2025**	01-Oct-2025	✓	**22-Apr-2025**	01-Oct-2025	✓
HDPE (no PTFE) (EP231X-ST) 0021_SW037_250407	**07-Apr-2025**	**14-Apr-2025**	04-Oct-2025	✓	**16-Apr-2025**	04-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0021_SW012_250331	**31-Mar-2025**	**15-Apr-2025**	27-Sep-2025	✓	**17-Apr-2025**	27-Sep-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
EP231P: PFAS Sums							
HDPE (no PTFE) (EP231X) 0021_SW013_250401, 0021_SW027_250401, 0021_SW043_250401, 0021_SW044_250401, 0021_SW045_250401, 0021_SW052_250401, 0021_SW053_250401	**01-Apr-2025**	**15-Apr-2025**	28-Sep-2025	✓	**17-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0021_SW056_250401, 0021_SW057_250401, 0021_SW058_250401	**01-Apr-2025**	**15-Apr-2025**	28-Sep-2025	✓	**22-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0021_SW004_250402, 0021_SW005_250402, 0021_SW006_250402, 0021_SW018_250402, 0021_SW020_250402, 0021_SW021_250402	**02-Apr-2025**	**15-Apr-2025**	29-Sep-2025	✓	**17-Apr-2025**	29-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0021_SW001_250403, 0021_SW003_250403, 0021_SW019_250403, 0021_SW022_250403, 0021_SW024_250403, 0021_SW035_250403, 0021_SW048_250403, 0021_SW051_250403	**03-Apr-2025**	**15-Apr-2025**	30-Sep-2025	✓	**17-Apr-2025**	30-Sep-2025	✓
HDPE (no PTFE) (EP231X-ST) 0021_SW036_250404, 0021_SW040_250404	**04-Apr-2025**	**14-Apr-2025**	01-Oct-2025	✓	**16-Apr-2025**	01-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0021_SW010_250404, 0021_SW025_250404, 0021_SW032_250404, 0021_SW034_250404	**04-Apr-2025**	**15-Apr-2025**	01-Oct-2025	✓	**17-Apr-2025**	01-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0021_SW059_250404	**04-Apr-2025**	**15-Apr-2025**	01-Oct-2025	✓	**22-Apr-2025**	01-Oct-2025	✓
HDPE (no PTFE) (EP231X-ST) 0021_SW037_250407	**07-Apr-2025**	**14-Apr-2025**	04-Oct-2025	✓	**16-Apr-2025**	04-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0021_SW012_250331	**31-Mar-2025**	**15-Apr-2025**	27-Sep-2025	✓	**17-Apr-2025**	27-Sep-2025	✓

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	5	47	**10.64**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-SD	6	52	**11.54**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-SD	3	52	**5.77**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-SD	3	52	**5.77**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-SD	3	52	**5.77**	**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	57	**10.53**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-ST	2	12	**16.67**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	3	57	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-ST	1	12	**8.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	3	57	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-ST	1	12	**8.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	3	57	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X-ST	1	12	**8.33**	**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-SD	SOIL	In-house: Analysis of sediments 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-ST	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	: **ES2510622**	Page	: 1 of 35
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	: 12626622	Date Samples Received	: 08-Apr-2025
Order number	: 12626622	Date Analysis Commenced	: 14-Apr-2025
C-O-C number	: ----	Issue Date	: 29-Apr-2025
Sampler	: Jarrad Mawbey		
Site	: ----		
Quote number	: ES23GHDSER0026		
No. of samples received	: 80		
No. of samples analysed	: 80		

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*
Ankit Joshi	Senior Chemist - Inorganics	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**

				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: 6510914)									
ES2510622-001	0021_SD001_250403	EA055: Moisture Content	----	0.1	%	28.8	34.2	17.1	0% - 20%
ES2510622-009	0021_SD012_250402	EA055: Moisture Content	----	0.1	%	16.2	17.4	6.7	0% - 20%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 6510915)									
ES2510622-021	0021_SD030_250404	EA055: Moisture Content	----	0.1	%	47.6	43.2	9.8	0% - 20%
ES2510622-029	0021_SD046_250401	EA055: Moisture Content	----	0.1	%	20.4	21.2	3.4	0% - 20%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 6510916)									
ES2510622-041	0021_SD075_250401	EA055: Moisture Content	----	0.1	%	19.6	19.5	0.0	0% - 20%
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 6508423)									
ES2510618-038	Anonymous	EP231X-SD: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	0.0202	0.0200	0.7	0% - 20%
		EP231X-SD: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	0.0076	0.0081	6.4	0% - 20%
		EP231X-SD: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	0.0007	0.0007	0.0	No Limit
		EP231X-SD: Perfluorobutane sulfonic acid (PFBS)	375-73-5	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 (%)
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 6508423) - continued									
ES2510622-006	0021_SD006_250404	EP231X-SD: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	0.0005	0.0005	0.0	No Limit
		EP231X-SD: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	0.150	0.140	7.4	0% - 20%
		EP231X-SD: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	0.0229	0.0225	1.5	0% - 20%
		EP231X-SD: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	0.0014	0.0016	17.4	No Limit
		EP231X-SD: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	0.0093	0.0092	1.2	0% - 20%
		EP231X-SD: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	0.0006	0.0006	0.0	No Limit
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 6509679)									
ES2510622-016	0021_SD020_250403	EP231X-SD: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	0.0008	0.0006	29.3	No Limit
		EP231X-SD: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	0.0006	0.0005	24.5	No Limit
		EP231X-SD: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
ES2510622-026	0021_SD040_250403	EP231X-SD: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	0.0023	0.0021	11.5	0% - 50%
		EP231X-SD: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	0.0018	0.0015	18.1	No Limit
		EP231X-SD: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 6510084)									
ES2510622-035	0021_SD066_250402	EP231X-SD: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	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 (%)*
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 6510084) - continued									
ES2510622-035	0021_SD066_250402	EP231X-SD: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	0.0004	0.0003	0.0	No Limit
		EP231X-SD: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
ES2510622-045	0021_SD111_250401	EP231X-SD: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	0.0004	0.0003	0.0	No Limit
		EP231X-SD: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	0.104	0.115	9.5	0% - 20%
		EP231X-SD: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	0.0143	0.0143	0.0	0% - 20%
		EP231X-SD: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	0.0016	0.0016	0.0	No Limit
		EP231X-SD: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	0.0032	0.0036	13.7	0% - 50%
		EP231X-SD: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	0.0002	0.0003	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 6508423)									
ES2510618-038	Anonymous	EP231X-SD: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
ES2510622-006	0021_SD006_250404	EP231X-SD: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	0.0003	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	0.0016	0.0018	14.6	No Limit
		EP231X-SD: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	0.0008	0.0008	0.0	No Limit
		EP231X-SD: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	0.0004	0.0003	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: 6508423) - continued									
ES2510622-006	0021_SD006_250404	EP231X-SD: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	0.0028	0.0025	11.1	0% - 50%
		EP231X-SD: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	0.0006	0.0005	25.2	No Limit
		EP231X-SD: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	0.0003	0.0	No Limit
		EP231X-SD: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005 (0.0006)*	mg/kg	<0.0006	<0.0006	0.0	No Limit
		EP231X-SD: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 6509679)									
ES2510622-016	0021_SD020_250403	EP231X-SD: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
ES2510622-026	0021_SD040_250403	EP231X-SD: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 6510084)									
ES2510622-035	0021_SD066_250402	EP231X-SD: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorononanoic acid (PFNA)	375-95-1	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: 6510084) - continued									
ES2510622-035	0021_SD066_250402	EP231X-SD: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
ES2510622-045	0021_SD111_250401	EP231X-SD: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	0.0014	0.0016	12.2	No Limit
		EP231X-SD: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	0.0006	0.0007	0.0	No Limit
		EP231X-SD: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	0.0030	0.0034	13.5	0% - 50%
		EP231X-SD: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	0.0002	0.0002	0.0	No Limit
		EP231X-SD: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	0.001	0.001	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 6508423)									
ES2510618-038	Anonymous	EP231X-SD: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
ES2510622-006	0021_SD006_250404	EP231X-SD: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	0.0011	0.0011	0.0	No Limit
		EP231X-SD: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: 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: 6508423) - continued									
ES2510622-006	0021_SD006_250404	EP231X-SD: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005 (0.0006)*	mg/kg	<0.0006	<0.0006	0.0	No Limit
		EP231X-SD: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005 (0.0006)*	mg/kg	<0.0006	<0.0006	0.0	No Limit
		EP231X-SD: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005 (0.0006)*	mg/kg	<0.0006	<0.0006	0.0	No Limit
		EP231X-SD: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005 (0.0006)*	mg/kg	<0.0006	<0.0006	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 6509679)									
ES2510622-016	0021_SD020_250403	EP231X-SD: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
ES2510622-026	0021_SD040_250403	EP231X-SD: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 6510084)									
ES2510622-035	0021_SD066_250402	EP231X-SD: Perfluorooctane sulfonamide (FOSA)	754-91-6	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: 6510084) - continued									
ES2510622-035	0021_SD066_250402	EP231X-SD: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
ES2510622-045	0021_SD111_250401	EP231X-SD: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	0.0016	0.0015	8.6	No Limit
		EP231X-SD: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X-SD: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 6508423)									
ES2510618-038	Anonymous	EP231X-SD: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
ES2510622-006	0021_SD006_250404	EP231X-SD: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	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 (%)*
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 6508423) - continued									
ES2510622-006	0021_SD006_250404	EP231X-SD: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 6509679)									
ES2510622-016	0021_SD020_250403	EP231X-SD: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
ES2510622-026	0021_SD040_250403	EP231X-SD: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 6510084)									
ES2510622-035	0021_SD066_250402	EP231X-SD: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
ES2510622-045	0021_SD111_250401	EP231X-SD: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X-SD: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 6508423)									
ES2510618-038	Anonymous	EP231X-SD: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	0.0278	0.0281	1.1	0% - 20%
		EP231X-SD: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	0.0278	0.0281	1.1	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 (%)
EP231P: PFAS Sums (QC Lot: 6508423) - continued									
ES2510618-038	Anonymous	EP231X-SD: Sum of PFAS	----	0.0002	mg/kg	0.0293	0.0294	0.3	0% - 20%
ES2510622-006	0021_SD006_250404	EP231X-SD: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	0.173	0.162	6.2	0% - 20%
		EP231X-SD: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	0.179	0.169	6.1	0% - 20%
		EP231X-SD: Sum of PFAS	----	0.0002	mg/kg	0.194	0.184	5.5	0% - 20%
EP231P: PFAS Sums (QC Lot: 6509679)									
ES2510622-016	0021_SD020_250403	EP231X-SD: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	0.0014	0.0011	24.0	No Limit
		EP231X-SD: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	0.0014	0.0011	24.0	No Limit
		EP231X-SD: Sum of PFAS	----	0.0002	mg/kg	0.0014	0.0011	24.0	No Limit
ES2510622-026	0021_SD040_250403	EP231X-SD: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	0.0041	0.0036	13.0	0% - 20%
		EP231X-SD: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	0.0041	0.0036	13.0	0% - 20%
		EP231X-SD: Sum of PFAS	----	0.0002	mg/kg	0.0041	0.0036	13.0	0% - 20%
EP231P: PFAS Sums (QC Lot: 6510084)									
ES2510622-035	0021_SD066_250402	EP231X-SD: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	0.0004	0.0003	28.6	No Limit
		EP231X-SD: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	0.0004	0.0003	28.6	No Limit
		EP231X-SD: Sum of PFAS	----	0.0002	mg/kg	0.0004	0.0003	28.6	No Limit
ES2510622-045	0021_SD111_250401	EP231X-SD: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	0.118	0.129	8.9	0% - 20%
		EP231X-SD: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	0.125	0.136	9.0	0% - 20%
		EP231X-SD: Sum of PFAS	----	0.0002	mg/kg	0.132	0.144	8.7	0% - 20%

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 6507380)									
ES2510113-048	Anonymous	EP231X-ST: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0003	µg/L	0.0020	0.0023	15.0	No Limit
		EP231X-ST: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0005	µg/L	<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: 6507380) - continued									
ES2510622-068	0021_SW037_250407	EP231X-ST: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0003	µg/L	0.0007	0.0008	0.0	No Limit
		EP231X-ST: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 6510731)									
ES2510618-061	Anonymous	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	0.04	0.04	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	0.08	0.08	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
ES2510622-050	0021_SW004_250402	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: 6510743)									
ES2510622-056	0021_SW018_250402	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	0.13	0.13	0.0	0% - 50%
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	0.03	0.03	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
ES2510622-059	0021_SW021_250402	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	0.34	0.32	7.4	0% - 20%
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	0.17	0.18	0.0	0% - 50%
		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	0.03	0.03	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

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: 6510753)									
ES2510623-014	Anonymous	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	3.18	3.64	13.4	0% - 20%
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	2.48	2.68	7.9	0% - 20%
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	0.26	0.26	0.0	0% - 50%
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	0.33	0.31	4.7	0% - 50%
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	0.12	0.12	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
ES2510623-015	Anonymous	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	1.33	1.50	11.9	0% - 20%
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	2.06	1.99	3.4	0% - 20%
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	0.05	0.06	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	0.09	0.09	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	0.06	0.06	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: 6507380)									
ES2510113-048	Anonymous	EP231X-ST: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluorooctanoic acid (PFOA)	335-67-1	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluorononanoic acid (PFNA)	375-95-1	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluorodecanoic acid (PFDA)	335-76-2	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluorobutanoic acid (PFBA)	375-22-4	0.002	µg/L	<0.002	<0.002	0.0	No Limit
ES2510622-068	0021_SW037_250407	EP231X-ST: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluorooctanoic acid (PFOA)	335-67-1	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluorononanoic acid (PFNA)	375-95-1	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluorodecanoic acid (PFDA)	335-76-2	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: Perfluorobutanoic acid (PFBA)	375-22-4	0.002	µg/L	<0.002	<0.002	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 6510731)									

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: 6510731) - continued									
ES2510618-061	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
ES2510622-050	0021_SW004_250402	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 6510743)									
ES2510622-056	0021_SW018_250402	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
ES2510622-059	0021_SW021_250402	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	0.05	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

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: 6510743) - continued									
ES2510622-059	0021_SW021_250402	EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 6510753)									
ES2510623-014	Anonymous	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	0.17	0.17	0.0	0% - 50%
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	0.30	0.27	8.4	0% - 50%
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	0.74	0.72	2.2	0% - 20%
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	0.12	0.13	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
ES2510623-015	Anonymous	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	0.04	0.05	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	0.15	0.16	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: 6507380)									
ES2510113-048	Anonymous	EP231X-ST: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0005	µg/L	<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 (%)*
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 6507380) - continued									
ES2510113-048	Anonymous	EP231X-ST: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.001	µg/L	<0.001	<0.001	0.0	No Limit
		EP231X-ST: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.001	µg/L	<0.001	<0.001	0.0	No Limit
		EP231X-ST: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.001	µg/L	<0.001	<0.001	0.0	No Limit
		EP231X-ST: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.001	µg/L	<0.001	<0.001	0.0	No Limit
ES2510622-068	0021_SW037_250407	EP231X-ST: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0005	µg/L	<0.0005	<0.0005	0.0	No Limit
		EP231X-ST: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.001	µg/L	<0.001	<0.001	0.0	No Limit
		EP231X-ST: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.001	µg/L	<0.001	<0.001	0.0	No Limit
		EP231X-ST: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.001	µg/L	<0.001	<0.001	0.0	No Limit
		EP231X-ST: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.001	µg/L	<0.001	<0.001	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 6510731)									
ES2510618-061	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
ES2510622-050	0021_SW004_250402	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: 6510731) - continued									
ES2510622-050	0021_SW004_250402	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: 6510743)									
ES2510622-056	0021_SW018_250402	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
ES2510622-059	0021_SW021_250402	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: 6510753)									
ES2510623-014	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: 6510753) - continued									
ES2510623-014	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
ES2510623-015	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: 6507380)									
ES2510113-048	Anonymous	EP231X-ST: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.001	µg/L	<0.001	<0.001	0.0	No Limit
		EP231X-ST: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.001	µg/L	0.016	0.016	0.0	0% - 50%
		EP231X-ST: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.001	µg/L	<0.001	<0.001	0.0	No Limit
		EP231X-ST: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.001	µg/L	<0.001	<0.001	0.0	No Limit
ES2510622-068	0021_SW037_250407	EP231X-ST: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.001	µg/L	<0.001	<0.001	0.0	No Limit
		EP231X-ST: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.001	µg/L	<0.001	<0.001	0.0	No Limit
		EP231X-ST: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.001	µg/L	<0.001	<0.001	0.0	No Limit
		EP231X-ST: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.001	µg/L	<0.001	<0.001	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 6510731)									
ES2510618-061	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

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: 6510731) - continued									
ES2510618-061	Anonymous	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
ES2510622-050	0021_SW004_250402	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: 6510743)									
ES2510622-056	0021_SW018_250402	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
ES2510622-059	0021_SW021_250402	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: 6510753)									
ES2510623-014	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

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: 6510753) - continued									
ES2510623-015	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: 6507380)									
ES2510113-048	Anonymous	EP231X-ST: Sum of PFAS	----	0.0003	µg/L	0.0180	0.0183	1.7	0% - 20%
ES2510622-068	0021_SW037_250407	EP231X-ST: Sum of PFAS	----	0.0003	µg/L	0.0007	0.0008	13.3	No Limit
EP231P: PFAS Sums (QC Lot: 6510731)									
ES2510618-061	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	0.12	0.12	0.0	0% - 50%
ES2510622-050	0021_SW004_250402	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 6510743)									
ES2510622-056	0021_SW018_250402	EP231X: Sum of PFAS	----	0.01	µg/L	0.16	0.16	0.0	0% - 50%
ES2510622-059	0021_SW021_250402	EP231X: Sum of PFAS	----	0.01	µg/L	0.61	0.58	5.0	0% - 20%
EP231P: PFAS Sums (QC Lot: 6510753)									
ES2510623-014	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	7.89	8.49	7.3	0% - 20%
ES2510623-015	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	3.78	3.93	3.9	0% - 20%

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

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

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6508423)								
EP231X-SD: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	80.8	73.0	123
EP231X-SD: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	83.7	68.0	136
EP231X-SD: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	83.7	67.0	130
EP231X-SD: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	90.0	70.0	132
EP231X-SD: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	88.6	59.0	134
EP231X-SD: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	0.00125 mg/kg	81.9	72.0	128
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6509679)								
EP231X-SD: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	105	73.0	123
EP231X-SD: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	98.6	68.0	136
EP231X-SD: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	82.3	67.0	130
EP231X-SD: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	96.8	70.0	132
EP231X-SD: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	104	59.0	134
EP231X-SD: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	0.00125 mg/kg	95.2	72.0	128
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6510084)								
EP231X-SD: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	97.0	73.0	123
EP231X-SD: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	100	68.0	136
EP231X-SD: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	93.1	67.0	130
EP231X-SD: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	103	70.0	132
EP231X-SD: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	110	59.0	134
EP231X-SD: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	0.00125 mg/kg	93.5	72.0	128
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6508423)								
EP231X-SD: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	87.0	64.0	136
EP231X-SD: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	80.6	66.0	139
EP231X-SD: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	101	69.0	133
EP231X-SD: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	92.5	69.0	132
EP231X-SD: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	88.0	69.0	133
EP231X-SD: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	90.2	72.0	129
EP231X-SD: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	80.4	70.0	132
EP231X-SD: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	91.5	71.0	131
EP231X-SD: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	91.4	69.0	135

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6508423) - continued								
EP231X-SD: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	0.00125 mg/kg	90.5	69.0	133
EP231X-SD: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	0.00625 mg/kg	85.5	71.0	135
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6509679)								
EP231X-SD: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	104	64.0	136
EP231X-SD: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	106	66.0	139
EP231X-SD: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	122	69.0	133
EP231X-SD: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	110	69.0	132
EP231X-SD: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	98.6	69.0	133
EP231X-SD: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	106	72.0	129
EP231X-SD: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	104	70.0	132
EP231X-SD: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	107	71.0	131
EP231X-SD: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	121	69.0	135
EP231X-SD: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	0.00125 mg/kg	97.8	69.0	133
EP231X-SD: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	0.00625 mg/kg	111	71.0	135
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6510084)								
EP231X-SD: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	98.0	64.0	136
EP231X-SD: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	85.4	66.0	139
EP231X-SD: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	102	69.0	133
EP231X-SD: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	102	69.0	132
EP231X-SD: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	104	69.0	133
EP231X-SD: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	100	72.0	129
EP231X-SD: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	101	70.0	132
EP231X-SD: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	103	71.0	131
EP231X-SD: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	99.1	69.0	135
EP231X-SD: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	0.00125 mg/kg	98.6	69.0	133
EP231X-SD: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	0.00625 mg/kg	98.7	71.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6508423)								
EP231X-SD: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	94.3	67.0	137
EP231X-SD: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	101	68.7	130
EP231X-SD: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	89.7	63.0	144
EP231X-SD: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	0.00312 mg/kg	107	71.6	129

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6508423) - continued								
EP231X-SD: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	100	65.1	134
EP231X-SD: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	89.6	61.0	139
EP231X-SD: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	97.8	69.8	131
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6509679)								
EP231X-SD: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	107	67.0	137
EP231X-SD: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	115	68.7	130
EP231X-SD: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	114	63.0	144
EP231X-SD: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	0.00312 mg/kg	114	71.6	129
EP231X-SD: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	111	65.1	134
EP231X-SD: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	89.8	61.0	139
EP231X-SD: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	100	69.8	131
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6510084)								
EP231X-SD: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	107	67.0	137
EP231X-SD: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	92.5	68.7	130
EP231X-SD: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	106	63.0	144
EP231X-SD: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	0.00312 mg/kg	108	71.6	129
EP231X-SD: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	108	65.1	134
EP231X-SD: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	96.6	61.0	139
EP231X-SD: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	108	69.8	131
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6508423)								
EP231X-SD: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	0.00125 mg/kg	97.6	65.0	137
EP231X-SD: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	0.00125 mg/kg	92.4	64.0	140
EP231X-SD: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	0.00125 mg/kg	81.8	62.0	145
EP231X-SD: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	0.00125 mg/kg	97.1	69.2	143
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6509679)								
EP231X-SD: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	0.00125 mg/kg	126	65.0	137

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6509679) - continued								
EP231X-SD: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	0.00125 mg/kg	86.4	64.0	140
EP231X-SD: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	0.00125 mg/kg	123	62.0	145
EP231X-SD: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	0.00125 mg/kg	77.8	69.2	143
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6510084)								
EP231X-SD: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	0.00125 mg/kg	97.7	65.0	137
EP231X-SD: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	0.00125 mg/kg	104	64.0	140
EP231X-SD: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	0.00125 mg/kg	100	62.0	145
EP231X-SD: 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
EP231P: PFAS Sums (QCLot: 6508423)								
EP231X-SD: Sum of PFHxS and PFOS	355-46-4/17 63-23-1	0.0002	mg/kg	<0.0002	----	----	----	----
EP231X-SD: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<0.0002	----	----	----	----
EP231X-SD: Sum of PFAS	----	0.0002	mg/kg	<0.0002	----	----	----	----
EP231P: PFAS Sums (QCLot: 6509679)								
EP231X-SD: Sum of PFHxS and PFOS	355-46-4/17 63-23-1	0.0002	mg/kg	<0.0002	----	----	----	----
EP231X-SD: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<0.0002	----	----	----	----
EP231X-SD: Sum of PFAS	----	0.0002	mg/kg	<0.0002	----	----	----	----
EP231P: PFAS Sums (QCLot: 6510084)								
EP231X-SD: Sum of PFHxS and PFOS	355-46-4/17 63-23-1	0.0002	mg/kg	<0.0002	----	----	----	----
EP231X-SD: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<0.0002	----	----	----	----
EP231X-SD: Sum of PFAS	----	0.0002	mg/kg	<0.0002	----	----	----	----

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6507380)								
EP231X-ST: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0005	µg/L	<0.0005	0.004 µg/L	84.2	50.0	130
EP231X-ST: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0005	µg/L	<0.0005	0.004 µg/L	86.7	50.0	130
EP231X-ST: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0005	µg/L	<0.0005	0.004 µg/L	87.0	50.0	130
EP231X-ST: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0005	µg/L	<0.0005	0.004 µg/L	94.1	50.0	130
EP231X-ST: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0003	µg/L	<0.0003	0.004 µg/L	91.4	50.0	130
EP231X-ST: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0005	µg/L	<0.0005	0.004 µg/L	91.2	50.0	130
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6510731)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.25 µg/L	77.9	72.0	130

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6510731) - continued								
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.25 µg/L	89.2	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.25 µg/L	93.9	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	93.6	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.25 µg/L	83.5	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.25 µg/L	81.5	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6510743)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.25 µg/L	77.6	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.25 µg/L	98.0	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.25 µg/L	102	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	88.2	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.25 µg/L	77.0	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.25 µg/L	63.9	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6510753)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.25 µg/L	83.7	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.25 µg/L	92.2	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.25 µg/L	92.7	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	93.0	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.25 µg/L	81.3	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.25 µg/L	75.3	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6507380)								
EP231X-ST: Perfluorobutanoic acid (PFBA)	375-22-4	0.002	µg/L	<0.002	0.02 µg/L	90.8	30.0	130
EP231X-ST: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0005	µg/L	<0.0005	0.004 µg/L	94.4	50.0	130
EP231X-ST: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0005	µg/L	<0.0005	0.004 µg/L	86.5	50.0	130
EP231X-ST: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0005	µg/L	<0.0005	0.004 µg/L	86.8	50.0	130
EP231X-ST: Perfluorooctanoic acid (PFOA)	335-67-1	0.0005	µg/L	<0.0005	0.004 µg/L	96.6	50.0	130
EP231X-ST: Perfluorononanoic acid (PFNA)	375-95-1	0.0005	µg/L	<0.0005	0.004 µg/L	95.1	50.0	130
EP231X-ST: Perfluorodecanoic acid (PFDA)	335-76-2	0.0005	µg/L	<0.0005	0.004 µg/L	90.6	50.0	130
EP231X-ST: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0005	µg/L	<0.0005	0.004 µg/L	85.2	40.0	130
EP231X-ST: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0005	µg/L	<0.0005	0.004 µg/L	103	40.0	130
EP231X-ST: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0005	µg/L	<0.0005	0.004 µg/L	79.8	40.0	130
EP231X-ST: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	µg/L	<0.0005	0.01 µg/L	99.2	40.0	130
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6510731)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	83.4	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	88.8	72.0	129

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report		
					Spike	Spike Recovery (%)	Acceptable Limits (%)
				Result	Concentration	LCS	Low	High
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6510731) - continued								
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	85.7	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	95.4	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	90.1	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	86.2	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	85.5	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	86.4	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	84.0	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	74.7	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: 6510743)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	81.7	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	84.5	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	89.6	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	90.9	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	79.4	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	79.3	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	86.5	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	83.4	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	86.4	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	74.3	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	108	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6510753)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	87.4	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	86.5	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	86.0	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	97.9	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	90.4	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	83.1	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	83.9	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	88.1	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	93.7	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	80.3	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	99.1	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6507380)								

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report		
					Spike	Spike Recovery (%)	Acceptable Limits (%)
				Result	Concentration	LCS	Low	High
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6507380) - continued								
EP231X-ST: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0005	µg/L	<0.0005	0.004 µg/L	89.1	40.0	130
EP231X-ST: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.001	µg/L	<0.001	0.01 µg/L	106	40.0	130
EP231X-ST: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.001	µg/L	<0.001	0.01 µg/L	99.5	40.0	130
EP231X-ST: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.001	µg/L	<0.001	0.01 µg/L	105	40.0	130
EP231X-ST: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.001	µg/L	<0.001	0.01 µg/L	89.4	40.0	130
EP231X-ST: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0005	µg/L	<0.0005	0.004 µg/L	95.0	40.0	130
EP231X-ST: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0005	µg/L	<0.0005	0.004 µg/L	87.2	40.0	130
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6510731)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	94.3	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	99.3	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	89.0	62.6	147
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	81.2	66.0	145
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	90.4	57.6	145
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	89.4	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	79.4	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6510743)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	84.2	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	105	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	80.7	62.6	147
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	81.6	66.0	145
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	90.5	57.6	145
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	68.6	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	88.4	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6510753)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	96.5	67.0	137

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6510753) - continued								
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	102	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	86.8	62.6	147
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	91.2	66.0	145
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	97.2	57.6	145
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	80.2	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	92.3	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6507380)								
EP231X-ST: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.001	µg/L	<0.001	0.004 µg/L	100	50.0	130
EP231X-ST: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.001	µg/L	<0.001	0.004 µg/L	93.0	50.0	130
EP231X-ST: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.001	µg/L	<0.001	0.004 µg/L	93.4	50.0	130
EP231X-ST: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.001	µg/L	<0.001	0.004 µg/L	84.3	50.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6510731)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.25 µg/L	94.5	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	92.5	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	133	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	97.9	71.4	144
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6510743)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.25 µg/L	80.1	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	126	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	81.8	71.4	144
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6510753)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.25 µg/L	113	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	113	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	92.6	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	92.9	71.4	144
EP231P: PFAS Sums (QCLot: 6507380)								
EP231X-ST: Sum of PFAS	----	0.0003	µg/L	<0.0003	----	----	----	----

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: 6508423)							
ES2510618-038	Anonymous	EP231X-SD: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.00125 mg/kg	74.8	73.0	123
		EP231X-SD: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.00125 mg/kg	118	68.0	136
		EP231X-SD: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.00125 mg/kg	97.0	67.0	130
		EP231X-SD: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.00125 mg/kg	92.2	70.0	132
		EP231X-SD: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.00125 mg/kg	87.7	59.0	134
		EP231X-SD: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.00125 mg/kg	81.5	72.0	128
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6509679)							
ES2510622-016	0021_SD020_250403	EP231X-SD: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.00125 mg/kg	98.3	73.0	123
		EP231X-SD: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.00125 mg/kg	80.2	68.0	136
		EP231X-SD: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.00125 mg/kg	79.1	67.0	130
		EP231X-SD: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.00125 mg/kg	84.4	70.0	132
		EP231X-SD: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.00125 mg/kg	104	59.0	134
		EP231X-SD: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.00125 mg/kg	99.7	72.0	128
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6510084)							
ES2510622-035	0021_SD066_250402	EP231X-SD: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.00125 mg/kg	89.9	73.0	123
		EP231X-SD: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.00125 mg/kg	93.8	68.0	136
		EP231X-SD: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.00125 mg/kg	101	67.0	130
		EP231X-SD: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.00125 mg/kg	101	70.0	132
		EP231X-SD: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.00125 mg/kg	105	59.0	134
		EP231X-SD: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.00125 mg/kg	93.1	72.0	128
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6508423)							
ES2510618-038	Anonymous	EP231X-SD: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.00125 mg/kg	80.4	64.0	136
		EP231X-SD: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.00125 mg/kg	88.8	66.0	139
		EP231X-SD: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.00312 mg/kg	99.2	69.0	133
		EP231X-SD: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.00125 mg/kg	90.5	69.0	132
		EP231X-SD: Perfluorooctanoic acid (PFOA)	335-67-1	0.00125 mg/kg	87.8	69.0	133
		EP231X-SD: Perfluorononanoic acid (PFNA)	375-95-1	0.00125 mg/kg	82.3	72.0	129
		EP231X-SD: Perfluorohexanoic acid (PFHxA)	307-24-4	0.00125 mg/kg	89.2	70.0	132
		EP231X-SD: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.00125 mg/kg	89.0	71.0	131
		EP231X-SD: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.00125 mg/kg	104	69.0	135
		EP231X-SD: Perfluorodecanoic acid (PFDA)	335-76-2	0.00125 mg/kg	84.4	69.0	133
		EP231X-SD: Perfluorobutanoic acid (PFBA)	375-22-4	0.00625 mg/kg	81.3	71.0	135
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6509679)							
ES2510622-016	0021_SD020_250403	EP231X-SD: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.00125 mg/kg	116	64.0	136
		EP231X-SD: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.00125 mg/kg	108	66.0	139
		EP231X-SD: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.00312 mg/kg	125	69.0	133

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: 6509679) - continued							
ES2510622-016	0021_SD020_250403	EP231X-SD: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.00125 mg/kg	101	69.0	132
		EP231X-SD: Perfluorooctanoic acid (PFOA)	335-67-1	0.00125 mg/kg	102	69.0	133
		EP231X-SD: Perfluorononanoic acid (PFNA)	375-95-1	0.00125 mg/kg	98.4	72.0	129
		EP231X-SD: Perfluorohexanoic acid (PFHxA)	307-24-4	0.00125 mg/kg	112	70.0	132
		EP231X-SD: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.00125 mg/kg	111	71.0	131
		EP231X-SD: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.00125 mg/kg	122	69.0	135
		EP231X-SD: Perfluorodecanoic acid (PFDA)	335-76-2	0.00125 mg/kg	94.3	69.0	133
		EP231X-SD: Perfluorobutanoic acid (PFBA)	375-22-4	0.00625 mg/kg	114	71.0	135
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6510084)							
ES2510622-035	0021_SD066_250402	EP231X-SD: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.00125 mg/kg	92.1	64.0	136
		EP231X-SD: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.00125 mg/kg	81.6	66.0	139
		EP231X-SD: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.00312 mg/kg	96.2	69.0	133
		EP231X-SD: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.00125 mg/kg	110	69.0	132
		EP231X-SD: Perfluorooctanoic acid (PFOA)	335-67-1	0.00125 mg/kg	101	69.0	133
		EP231X-SD: Perfluorononanoic acid (PFNA)	375-95-1	0.00125 mg/kg	99.8	72.0	129
		EP231X-SD: Perfluorohexanoic acid (PFHxA)	307-24-4	0.00125 mg/kg	109	70.0	132
		EP231X-SD: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.00125 mg/kg	101	71.0	131
		EP231X-SD: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.00125 mg/kg	95.7	69.0	135
		EP231X-SD: Perfluorodecanoic acid (PFDA)	335-76-2	0.00125 mg/kg	95.2	69.0	133
		EP231X-SD: Perfluorobutanoic acid (PFBA)	375-22-4	0.00625 mg/kg	100.0	71.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6508423)							
ES2510618-038	Anonymous	EP231X-SD: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.00125 mg/kg	84.3	67.0	137
		EP231X-SD: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.00312 mg/kg	97.2	68.7	130
		EP231X-SD: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.00125 mg/kg	81.0	63.0	144
		EP231X-SD: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.00312 mg/kg	101	71.6	129
		EP231X-SD: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.00312 mg/kg	111	65.1	134
		EP231X-SD: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.00125 mg/kg	76.8	61.0	139
		EP231X-SD: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.00312 mg/kg	99.6	69.8	131
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6509679)							
ES2510622-016	0021_SD020_250403	EP231X-SD: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.00125 mg/kg	108	67.0	137
		EP231X-SD: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.00312 mg/kg	102	68.7	130

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: 6509679) - continued							
ES2510622-016	0021_SD020_250403	EP231X-SD: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.00125 mg/kg	115	63.0	144
		EP231X-SD: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.00312 mg/kg	116	71.6	129
		EP231X-SD: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.00312 mg/kg	116	65.1	134
		EP231X-SD: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.00125 mg/kg	92.4	61.0	139
		EP231X-SD: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.00312 mg/kg	103	69.8	131
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6510084)							
ES2510622-035	0021_SD066_250402	EP231X-SD: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.00125 mg/kg	105	67.0	137
		EP231X-SD: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.00312 mg/kg	97.6	68.7	130
		EP231X-SD: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.00125 mg/kg	89.8	63.0	144
		EP231X-SD: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.00312 mg/kg	87.0	71.6	129
		EP231X-SD: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.00312 mg/kg	111	65.1	134
		EP231X-SD: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.00125 mg/kg	99.7	61.0	139
		EP231X-SD: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.00312 mg/kg	90.9	69.8	131
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6508423)							
ES2510618-038	Anonymous	EP231X-SD: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.00125 mg/kg	80.3	65.0	137
		EP231X-SD: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.00125 mg/kg	88.3	64.0	140
		EP231X-SD: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.00125 mg/kg	78.4	62.0	145
		EP231X-SD: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.00125 mg/kg	120	69.2	143
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6509679)							
ES2510622-016	0021_SD020_250403	EP231X-SD: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.00125 mg/kg	106	65.0	137
		EP231X-SD: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.00125 mg/kg	93.4	64.0	140
		EP231X-SD: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.00125 mg/kg	118	62.0	145
		EP231X-SD: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.00125 mg/kg	79.9	69.2	143
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6510084)							
ES2510622-035	0021_SD066_250402	EP231X-SD: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.00125 mg/kg	105	65.0	137
		EP231X-SD: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.00125 mg/kg	115	64.0	140
		EP231X-SD: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.00125 mg/kg	99.3	62.0	145

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	Matrix Spike (MS) Report: SpikeRecovery(%) MS	Matrix Spike (MS) Report: Acceptable Limits (%) Low	Matrix Spike (MS) Report: Acceptable Limits (%) High
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6510084) - continued							
ES2510622-035	0021_SD066_250402	EP231X-SD: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.00125 mg/kg	80.9	69.2	143

Sub-Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	Matrix Spike (MS) Report: SpikeRecovery(%) MS	Matrix Spike (MS) Report: Acceptable Limits (%) Low	Matrix Spike (MS) Report: Acceptable Limits (%) High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6507380)							
ES2510113-049	Anonymous	EP231X-ST: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.004 µg/L	81.4	50.0	130
		EP231X-ST: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.004 µg/L	82.1	50.0	130
		EP231X-ST: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.004 µg/L	87.2	50.0	130
		EP231X-ST: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.004 µg/L	123	50.0	130
		EP231X-ST: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.004 µg/L	112	50.0	130
		EP231X-ST: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.004 µg/L	76.4	30.0	130
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6510731)							
ES2510622-050	0021_SW004_250402	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.25 µg/L	75.6	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.25 µg/L	83.8	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.25 µg/L	91.0	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.25 µg/L	93.5	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.25 µg/L	85.7	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.25 µg/L	75.4	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6510743)							
ES2510622-056	0021_SW018_250402	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.25 µg/L	74.8	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.25 µg/L	95.2	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.25 µg/L	85.2	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.25 µg/L	88.1	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.25 µg/L	85.0	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.25 µg/L	68.5	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6510753)							
ES2510623-015	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.25 µg/L	76.2	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.25 µg/L	89.6	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	86.4	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	69.8	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6507380)							
ES2510113-049	Anonymous	EP231X-ST: Perfluorobutanoic acid (PFBA)	375-22-4	0.02 µg/L	83.4	30.0	130
		EP231X-ST: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.004 µg/L	95.9	50.0	130

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: 6507380) - continued							
ES2510113-049	Anonymous	EP231X-ST: Perfluorohexanoic acid (PFHxA)	307-24-4	0.004 µg/L	96.9	50.0	130
		EP231X-ST: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.004 µg/L	78.1	50.0	130
		EP231X-ST: Perfluorooctanoic acid (PFOA)	335-67-1	0.004 µg/L	92.9	50.0	130
		EP231X-ST: Perfluorononanoic acid (PFNA)	375-95-1	0.004 µg/L	82.8	50.0	130
		EP231X-ST: Perfluorodecanoic acid (PFDA)	335-76-2	0.004 µg/L	80.6	50.0	130
		EP231X-ST: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.004 µg/L	79.6	30.0	130
		EP231X-ST: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.004 µg/L	99.1	30.0	130
		EP231X-ST: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.004 µg/L	56.1	30.0	130
		EP231X-ST: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.01 µg/L	102	30.0	130
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6510731)							
ES2510622-050	0021_SW004_250402	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	85.8	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	90.9	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	91.4	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	91.4	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	95.8	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	84.3	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	84.9	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	86.8	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	88.1	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	78.9	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	99.5	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6510743)							
ES2510622-056	0021_SW018_250402	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	80.8	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	85.0	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	94.7	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	87.2	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	84.1	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	88.9	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	87.4	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	85.9	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	82.5	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	68.5	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	98.2	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6510753)							
ES2510623-015	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	87.5	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	91.9	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	89.3	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	93.3	72.0	130

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: 6510753) - continued							
ES2510623-015	Anonymous	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	88.4	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	84.4	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	79.4	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	86.6	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	100	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	86.8	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	108	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6507380)							
ES2510113-049	Anonymous	EP231X-ST: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.004 µg/L	77.2	30.0	130
		EP231X-ST: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.01 µg/L	102	30.0	130
		EP231X-ST: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.01 µg/L	53.3	30.0	130
		EP231X-ST: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.01 µg/L	98.5	30.0	130
		EP231X-ST: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.01 µg/L	101	30.0	130
		EP231X-ST: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.004 µg/L	86.9	30.0	130
		EP231X-ST: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.004 µg/L	82.8	30.0	130
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6510731)							
ES2510622-050	0021_SW004_250402	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	88.6	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	96.2	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	87.5	62.6	147
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	83.2	66.0	145
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	96.6	57.6	145
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	85.7	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	77.8	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6510743)							
ES2510622-056	0021_SW018_250402	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	87.0	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	94.5	62.6	147

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: 6510743) - continued							
ES2510622-056	0021_SW018_250402	EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	80.8	66.0	145
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	99.3	57.6	145
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	81.0	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	89.2	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6510753)							
ES2510623-015	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	108	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	93.8	62.6	147
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	86.3	66.0	145
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	92.3	57.6	145
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	82.8	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	91.1	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6507380)							
ES2510113-049	Anonymous	EP231X-ST: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.004 µg/L	89.2	50.0	130
		EP231X-ST: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.004 µg/L	87.4	50.0	130
		EP231X-ST: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.004 µg/L	110	50.0	130
		EP231X-ST: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.004 µg/L	75.7	50.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6510731)							
ES2510622-050	0021_SW004_250402	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.25 µg/L	89.2	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.25 µg/L	83.2	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.25 µg/L	124	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: 6510743)							
ES2510622-056	0021_SW018_250402	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.25 µg/L	89.1	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.25 µg/L	85.6	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.25 µg/L	123	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.25 µg/L	93.9	71.4	144
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6510753)							
ES2510623-015	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.25 µg/L	89.3	63.0	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*
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6510753) - continued							
ES2510623-015	Anonymous	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	109	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.25 µg/L	96.3	71.4	144

CHAIN OF CUSTODY

ALS Laboratory group

CLIENT: [illegible]	TURNAROUND REQUIREMENT: ☐ Standard TAT (List due date):		
OFFICE: Sydney	Standard TAT may be longer for some tests (e.g. Ultra Trace Organics) ☐ Non-Standard or urgent TAT (List due date):		
PROJECT: AGL 2021 PFAS/MP 27	ALS QUOTE NO.: ES2510/EQ/0120	COC SEQUENCE NUMBER (Circle): COC 1 2 3 4 5 6 7 OF 1 2 3 4 5 6 7	
ORDER NUMBER: [illegible]	CONTACT PH: [illegible]		
PROJECT MANAGER: [illegible]			
SAMPLER: [illegible]	SAMPLER MOBILE: [illegible]	RELINQUISHED BY: [illegible]	RECEIVED BY: [illegible]
COC emailed to ALS? (YES / NO)	EDD FORMAT (or default):	DATE/TIME: [illegible]	DATE/TIME: [illegible]
Email Reports to: [illegible]			

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

LAB ID	SAMPLE ID	Date and Time	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL CONTAINERS	ES2510 PFAS Full Suite	PFAS - Short Chain (Waters & Leach) Suite (ES2510-ST)	HOLD	
1	0021_MW010_250402	02 Apr 2025 13:05	W	Ice	2	X			
2	0021_MW020_250402	02 Apr 2025 08:34	W	Ice	4	X			EXTRA SAMPLES FOR LAB QC
3	0021_MW021_250401	01 Apr 2025 16:23	W	Ice	4	X			EXTRA SAMPLE FOR LAB QC
4	0021_MW022_250401	01 Apr 2025 13:01	W	Ice	2	X			
5	0021_MW024_250401	01 Apr 2025 12:12	W	Ice	4	X			EXTRA SAMPLE FOR LAB QC
6	0021_MW025_250402	02 Apr 2025 11:03	W	Ice	2	X			
7	0021_MW026_250407	07 Apr 2025 10:26	W	Ice	2	X			
8	0021_MW028_250402	02 Apr 2025 14:12	W	Ice	2	X			
9	0021_MW036_250403	03 Apr 2025 09:24	W	Ice	4	X			EXTRA SAMPLE FOR LAB QC
10	0021_MW060_250401	01 Apr 2025 15:44	W	Ice	2	X			
11	0021_MW063_250403	03 Apr 2025 14:51	W	Ice	2	X			
12	0021_MW064_250403	03 Apr 2025 13:44	W	Ice	2	X			
13	0021_MW065_250403	03 Apr 2025 12:32	W	Ice	2	X			
14	0021_MW070_250407	07 Apr 2025 10:18	W	Ice	4	X			EXTRA SAMPLE FOR LAB QC
15	0021_MW071_250407	07 Apr 2025 11:34	W	Ice	2	X			
16	0021_MW072_250407	07 Apr 2025 10:43	W	Ice	2	X			
17	0021_MW101_250404	04 Apr 2025 08:59	W	Ice	4	X			EXTRA SAMPLE FOR LAB QC
18	0021_MW102_250404	04 Apr 2025 09:45	W	Ice	4	X			EXTRA SAMPLE FOR LAB QC
19	0021_MW103_250403	03 Apr 2025 14:49	W	Ice	2	X			
20	0021_MW104_250403	03 Apr 2025 13:02	W	Ice	2	X			
21	0021_MW105_250403	03 Apr 2025 12:01	W	Ice	4	X			EXTRA SAMPLE FOR LAB QC
22	0021_MW106_250404	04 Apr 2025 11:06	W	Ice	4	X			EXTRA SAMPLE FOR LAB QC
23	0021_MW107_250403	03 Apr 2025 11:36	W	Ice	2	X			
24	0021_MW108_250404	04 Apr 2025 11:01	W	Ice	4	X			EXTRA SAMPLE FOR LAB QC
25	0021_MW109_250403	03 Apr 2025 10:35	W	Ice	2	X			
26	0021_MW110_250401	01 Apr 2025 14:34	W	Ice	2	X			
27	0021_MW111_250406	06 Apr 2025 08:47	W	Ice	2	X			
28	0021_MW112_250401	01 Apr 2025 13:41	W	Ice	2	X			
29	0021_MW113_250407	07 Apr 2025 11:35	W	Ice	4	X			EXTRA SAMPLES FOR LAB QC
30	0021_MW114_250404	04 Apr 2025 09:30	W	Ice	4	X			EXTRA SAMPLE FOR LAB QC
31	0021_MW117_250402	02 Apr 2025 14:22	W	Ice	2	X			
32	0021_MW118_250402	02 Apr 2025 15:34	W	Ice	2	X			
33	0021_MW119_250402	02 Apr 2025 15:05	W	Ice	2	X			
34	0021_MW120_250402	02 Apr 2025 14:19	W	Ice	2	X			
35	0021_MW121_250402	02 Apr 2025 17:13	W	Ice	2	X			
36	0021_MW122_250402	02 Apr 2025 15:18	W	Ice	2	X			
37	0021_MW124_250403	03 Apr 2025 08:24	W	Ice	2	X			EXTRA SAMPLE FOR LAB QC
38	0021_MW126_250402	02 Apr 2025 12:03	W	Ice	2	X			
39	0021_MW126_250401	01 Apr 2025 13:15	W	Ice	2	X			EXTRA SAMPLE FOR LAB QC
40	0021_MW127_250402	02 Apr 2025 16:35	W	Ice	4	X			EXTRA SAMPLE FOR LAB QC
41	0021_MW128_250402	02 Apr 2025 10:16	W	Ice	2	X			
42	0021_MW129_250403	03 Apr 2025 10:55	W	Ice	2		X		
43	0021_MW130_250404	04 Apr 2025	W	Ice	2		X		
44	0021_MW131_250401	01 Apr 2025 15:45	W	Ice	4	X			EXTRA SAMPLE FOR LAB QC
45	0021_MW132_250401	01 Apr 2025 16:37	W	Ice	2	X			
46	0021_MW133_250402	02 Apr 2025 11:50	W	Ice	4	X			EXTRA SAMPLE FOR LAB QC
47	0021_MW134_250403	03 Apr 2025 09:14	W	Ice	2	X			
48	0021_MW135_250404	04 Apr 2025 17:12	W	Ice	2		X		EXTRA SAMPLE FOR LAB QC
49	0021_MW136_250404	04 Apr 2025 15:10	W	Ice	4		X		EXTRA SAMPLE FOR LAB QC
50	0021_MW137_250404	04 Apr 2025 14:01	W	Ice	4		X		EXTRA SAMPLE FOR LAB QC
51	0021_MW138_250403	03 Apr 2025 09:16	W	Ice	2		X		
52	0021_MW139_250403	03 Apr 2025 13:13	W	Ice	2		X		EXTRA SAMPLE FOR LAB QC
53	0021_MW140_250403	03 Apr 2025 [illegible]	W	Ice	2		X		
54	0021_MW150_250404	04 Apr 2025 09:54	W	Ice	4	X			EXTRA SAMPLE FOR LAB QC
55	0021_MW151_250404	04 Apr 2025 09:49	W	Ice	4	X			EXTRA SAMPLE FOR LAB QC
56	0021_MW152_250408	08 Apr 2025 08:10	W	Ice	2	X			

ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to ensure Laboratory analysis is carried out correctly). Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).

Received By/Date: [illegible]

Relinquished By/Date: [illegible]

Received By/Date: [illegible]

Relinquished By/Date: [illegible]

Received By/Date: [illegible]

Environmental Division
Sydney
Work Order Reference
ES2510623

Telephone : – 61-2-8784 8555

CHAIN OF CUSTODY

ALS Laboratory Group

CLIENT:	TURNAROUND REQUIREMENT: ☐ Standard TAT (List due date):		
OFFICE:	Standard TAT may be longer for some tests e.g. Ultra Trace Organics	☐ Non Standard or urgent TAT (List due date):	
PROJECT:	ALS QUOTE NO.:		
ORDER NUMBER:			
PROJECT MANAGER:	CONTACT PH:		
SAMPLER:	SAMPLER MOBILE:		
COC emailed to ALS? (YES / NO)	EDD FORMAT (or default):		
Email Reports to:			

COC SEQUENCE NUMBER (Circle): COC: 1 2 3 4 5 6 7 ... | OF: 1 2 3 4 5 6 7 ...

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
DATE/TIME:	DATE/TIME:	DATE/TIME:	DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

ALS USE ONLY	SAMPLE DETAILS (MATRIX: W = Water, S = Soil/Solid)			ANALYSIS REQUIRED including SUITE(S) (NB. Suite Codes must be listed to ensure correct analysis) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).									
LAB ID	SAMPLE ID	Date and Time	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL CONTAINERS	EP231X (PFAS Full Suite)	PFAS - Short Chain Mobile List (EP231X-SL)				HOLD		
57	0621_MW155_250404	04 Apr 2025 08:58	W	ICE	4	X							EXTRA SAMPLE FOR LAB QC
58	0621_MW154_250404	04 Apr 2025 09:13	W	ICE	2	X							
59	0621_MW153_250404	04 Apr 2025 10:06	W	ICE	4	X							EXTRA SAMPLE FOR LAB QC
60	0621_MW150_250402	02 Apr 2025 09:32	W	ICE	2	X							
61	0621_MW152_250402	02 Apr 2025 10:56	W	ICE	2	X							
62	0621_MW136_250402	02 Apr 2025 12:10	W	ICE	2	X							
63	0621_OTH001_250407	07 Apr 2025 12:24	W	ICE	4	X							EXTRA SAMPLE FOR LAB QC
64	0621_OTH002_250407	07 Apr 2025 12:03	W	ICE	2	X							
65	0621_OTH003_250407	07 Apr 2025 12:51	W	ICE	2	X							
66	0621_OTH005_250407	07 Apr 2025 13:06	W	ICE	2	X							
67	0621_OTH008_250407	07 Apr 2025 12:16	W	ICE	4	X							EXTRA SAMPLE FOR LAB QC
68	0621_QC102_250331	31 Mar 2025 16:00	W	ICE	2	X							
69	0621_QC103_250401	01 Apr 2025 08:55	W	ICE	2	X							
70	0621_QC104_250401	01 Apr 2025 13:42	W	ICE	2	X							
71	0621_QC105_250401	01 Apr 2025	W	ICE	2	X							
72	0621_QC106_250402	02 Apr 2025 09:30	W	ICE	2	X							
73	0621_QC107_250403	03 Apr 2025 16:00	W	ICE	2	X							
74	0621_QC108_250403	03 Apr 2025 12:15	W	ICE	2		X						
75	0621_QC109_250404	04 Apr 2025 09:30	W	ICE	3	X							
76	0621_QC110_250404	04 Apr 2025 10:45	W	ICE	2	X							
77	0621_QC111_250404	04 Apr 2025 16:25	W	ICE	2	X							
78	0621_QC136_250401	01 Apr 2025 16:45	W	ICE	3	X							
79	0621_QC156_250402	02 Apr 2025	W	ICE	3	X							
80	0621_QC136_250402	02 Apr 2025	W	ICE	2	X							
81	0621_QC139_250403	03 Apr 2025 14:20	W	ICE	2	X							
82	0621_QC140_250404	04 Apr 2025 08:58	W	ICE	3	X							
83	0621_QC141_250404	04 Apr 2025 13:28	W	ICE	2	X							
84	0621_QC154_250401	01 Apr 2025 13:41	W	ICE	2	X							
85	0621_QC155_250402	02 Apr 2025 10:13	W	ICE	2	X							
86	0621_QC156_250403	03 Apr 2025 11:38	W	ICE	2	X							
87	0621_QC157_250407	07 Apr 2025 12:24	W	ICE	2	X							
Dup1	0621_QC102_250331	31 Mar 2025 16:00	W	ICE	3								PLEASE FORWARD TO EUROFINS USING ATTACHED COC
Dup2	0621_QC203_250401	01 Apr 2025 08:55	W	ICE	2								PLEASE FORWARD TO EUROFINS USING ATTACHED COC
Dup3	0621_QC204_250401	01 Apr 2025 13:42	W	ICE	2								PLEASE FORWARD TO EUROFINS USING ATTACHED COC
Dup4	0621_QC205_250401	01 Apr 2025	W	ICE	2								PLEASE FORWARD TO EUROFINS USING ATTACHED COC
Dup5	0621_QC206_250402	02 Apr 2025 09:30	W	ICE	2								PLEASE FORWARD TO EUROFINS USING ATTACHED COC
Dup6	0621_QC208_250403	03 Apr 2025 12:15	W	ICE	2								PLEASE FORWARD TO EUROFINS USING ATTACHED COC
Dup7	0621_QC209_250404	04 Apr 2025 09:30	W	ICE	3								PLEASE FORWARD TO EUROFINS USING ATTACHED COC
Dup8	0621_QC210_250404	04 Apr 2025 10:45	W	ICE	2								PLEASE FORWARD TO EUROFINS USING ATTACHED COC
Dup9	0621_QC211_250404	04 Apr 2025 16:25	W	ICE	2								PLEASE FORWARD TO EUROFINS USING ATTACHED COC
Dup10	0621_QC234_250401	01 Apr 2025 16:45	W	ICE	4								PLEASE FORWARD TO EUROFINS USING ATTACHED COC
Dup11	0621_QC235_250402	02 Apr 2025	W	ICE	3								PLEASE FORWARD TO EUROFINS USING ATTACHED COC
Dup12	0621_QC236_250402	02 Apr 2025	W	ICE	2								PLEASE FORWARD TO EUROFINS USING ATTACHED COC
Dup13	0621_QC239_250403	03 Apr 2025 14:20	W	ICE	2								PLEASE FORWARD TO EUROFINS USING ATTACHED COC
Dup14	0621_QC240_250404	04 Apr 2025 08:58	W	ICE	3								PLEASE FORWARD TO EUROFINS USING ATTACHED COC
Dup15	0621_QC241_250404	04 Apr 2025 13:28	W	ICE	2								PLEASE FORWARD TO EUROFINS USING ATTACHED COC
Dup16	0621_QC254_250402	02 Apr 2025 09:32	W	ICE	2								PLEASE FORWARD TO EUROFINS USING ATTACHED COC
Dup17	0621_QC255_250403	03 Apr 2025 09:24	W	ICE	2								PLEASE FORWARD TO EUROFINS USING ATTACHED COC
Dup18	0621_QC256_250403	03 Apr 2025 12:01	W	ICE	2								PLEASE FORWARD TO EUROFINS USING ATTACHED COC
Dup19	0621_QC257_250407	07 Apr 2025 12:24	W	ICE	2								PLEASE FORWARD TO EUROFINS USING ATTACHED COC
1	0621_SD001_250403	03 Apr 2025 13:52	S	ICE	1	X							
2	0621_SD002_250403	03 Apr 2025 16:10	S	ICE	1	X							
3	0621_SD003_250403	03 Apr 2025	S	ICE	1	X							
4	0621_SD001_250402	02 Apr 2025 09:30	S	ICE	1	X							
5	0621_SD005_250402	02 Apr 2025 09:52	S	ICE	1	X							
6	0621_SD006_250404	04 Apr 2025 16:15	S	ICE	1	X							

CHAIN OF CUSTODY

ALS Environmental

CLIENT:	TURNAROUND REQUIREMENT: ☐ Standard TAT (List due date):	LABORATORY USE ONLY	
OFFICE:	☐ Non Standard or urgent TAT (List due date):		
PROJECT:	ALS QUOTE NO.:	COC SEQUENCE NUMBER (Circle)	
ORDER NUMBER:		COC: 1 2 3 4 5 6 7 8	
PROJECT MANAGER:	CONTACT PH:	OC: 1 2 3 4 5 6 7 8	
SAMPLER:	SAMPLER MOBILE:	RELINQUISHED BY:	RECEIVED BY:
DOC emailed to ALS? (YES / NO)	EDD FORMAT (or default):		
Email Reports to:		DATE/TIME:	DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

ALS USE	ALS USE ONLY	SAMPLE DETAILS				ANALYSES REQUIRED including SUITES (NB. Suite codes must be listed to attract suite price)									
LAB ID	SAMPLE ID	Date and Time	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL COUNT NUMBERS	EP231X (PFAS Full Suite)	PFAS - Upper Trigger Waters Long Suite (EP231X-ST)				PFOS				
1	0021_SD009_250401	01 Apr 2025 16:00	S	ICE	1	X									
5	0021_SD011_250401	01 Apr 2025 16:30	S	ICE	1	X									
9	0021_SD012_250402	02 Apr 2025 08:45	S	ICE	1	X									
10	0021_SD013_250402	02 Apr 2025 09:07	S	ICE	1	X									
11	0021_SD014_250402	02 Apr 2025 09:10	S	ICE	1	X									
12	0021_SD015_250403	03 Apr 2025 11:20	S	ICE	2	X									EXTRA SAMPLE FOR LAB QC
13	0021_SD016_250402	02 Apr 2025 09:52	S	ICE	1	X									
14	0021_SD017_250402	02 Apr 2025 09:30	S	ICE	1	X									
15	0021_SD018_250403	03 Apr 2025 16:05	S	ICE	1	X									
16	0021_SD020_250403	03 Apr 2025 16:25	S	ICE	1	X									
17	0021_SD021_250401	01 Apr 2025 16:33	S	ICE	1	X									
18	0021_SD022_250401	01 Apr 2025 14:45	S	ICE	1	X									
19	0021_SD023_250404	04 Apr 2025 13:40	S	ICE	1	X									
20	0021_SD029_250403	03 Apr 2025 10:00	S	ICE	1	X									
21	0021_SD030_250404	04 Apr 2025 10:20	S	ICE	1	X									
22	0021_SD031_250407	07 Apr 2025 08:38	S	ICE	1	X									
23	0021_SD035_250401	01 Apr 2025 14:02	S	ICE	1	X									
24	0021_SD036_250401	01 Apr 2025 12:51	S	ICE	1	X									
25	0021_SD037_250401	01 Apr 2025 14:52	S	ICE	1	X									
26	0021_SD040_250403	03 Apr 2025 15:39	S	ICE	1	X									
27	0021_SD041_250403	03 Apr 2025	S	ICE	1	X									
28	0021_SD044_250401	01 Apr 2025 13:42	S	ICE	1	X									
29	0021_SD046_250401	01 Apr 2025 14:30	S	ICE	1	X									
30	0021_SD049_250404	04 Apr 2025 14:41	S	ICE	1	X									
31	0021_SD050_250401	01 Apr 2025 09:26	S	ICE	1	X									
32	0021_SD054_250402	02 Apr 2025	S	ICE	1	X									
33	0021_SD058_250401	01 Apr 2025 09:55	S	ICE	1	X									
34	0021_SD059_250401	01 Apr 2025	S	ICE	1	X									
35	0021_SD066_250402	02 Apr 2025 09:55	S	ICE	1	X									
36	0021_SD067_250402	02 Apr 2025 09:30	S	ICE	1	X									
37	0021_SD068_250402	02 Apr 2025 09:30	S	ICE	1	X									
38	0021_SD069_250402	02 Apr 2025 08:54	S	ICE	1	X									
39	0021_SD070_250402	02 Apr 2025 08:22	S	ICE	1	X									
40	0021_SD073_250404	04 Apr 2025 10:45	S	ICE	1	X									
41	0021_SD075_250401	01 Apr 2025 10:46	S	ICE	1	X									
42	0021_SD080_250404	04 Apr 2025 13:23	S	ICE	1	X									
43	0021_SD083_250404	04 Apr 2025 16:28	S	ICE	1	X									
44	0021_SD110_250402	02 Apr 2025 08:36	S	ICE	1	X									
45	0021_SD111_250401	01 Apr 2025 12:19	S	ICE	1	X									
46	0021_SD183_250403	03 Apr 2025 09:09	S	ICE	1	X									
47	0021_SD183_A_250403	03 Apr 2025	S	ICE	1	X									
48	0021_SW001_250403	03 Apr 2025 12:52	W	ICE	1	X									
49	0021_SW003_250403	03 Apr 2025	W	ICE	3	X									
50	0021_SW004_250402	02 Apr 2025 08:50	W	ICE	1	X									
51	0021_SW005_250402	02 Apr 2025 08:26	W	ICE	2	X									
52	0021_SW006_250402	02 Apr 2025 08:02	W	ICE	1	X									
53	0021_SW010_250404	04 Apr 2025 16:13	W	ICE	2	X									
54	0021_SW012_250331	31 Mar 2025 15:00	W	ICE	1	X									
55	0021_SW013_250401	01 Apr 2025 16:00	W	ICE	2	X									
56	0021_SW016_250402	02 Apr 2025 09:10	W	ICE	2	X									
57	0021_SW019_250403	03 Apr 2025 14:20	W	ICE	3	X									
58	0021_SW020_250402	02 Apr 2025 09:52	W	ICE	2	X									
59	0021_SW021_250402	02 Apr 2025 09:30	W	ICE	4	X									EXTRA SAMPLE FOR LAB QC
60	0021_SW022_250403	03 Apr 2025 16:05	W	ICE	2	X									
61	0021_SW024_250403	03 Apr 2025 15:25	W	ICE	2	X									
62	0021_SW023_250404	04 Apr 2025 15:33	W	ICE	2	X									

CHAIN OF CUSTODY

ALS

CLIENT:	TURNAROUND REQUIREMENT: ☐ Standard TAT (List due date):		
OFFICE:	☐ Non-Standard or rush TAT (List due date):		
PROJECT:	ALS QUOTE NO.:	COC REQUISITION NUMBER (circle):	
ORDER NUMBER:		1 2 3 4 5 6 7 8 9 10	
PROJECT MANAGER:	CONTACT PH:	OR: 1 2 3 4 5 6 7 8 9 10	

SAMPLER:	SAMPLER MOBILE:	RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
COC emailed to ALS? YES / NO	COC FORMAT (or default):				
Email Reports to:		DATE/TIME:	DATE/TIME:	DATE/TIME:	DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

ALS USE ONLY	SAMPLE DETAILS MATRIX: SOLID (S) WATER (W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to the right) Where Metals are required, indicate if total (unfiltered) or dissolved (field filtered). If Dissolved field filtered is required, indicate in comments								
LAB ID	SAMPLE ID	Date and Time	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL CONTAINERS	EP231X (PFAS Full Suite)	OP4AS - Short Chain Water Soluble (EP231X-SCWT)				HOLD			SUITE
63	0021_SW027_250401	01 Apr 2025 14:05	W	ICE	2	X								
64	0021_SW032_250404	04 Apr 2025 10:20	W	ICE	2	X								
65	0021_SW034_250404	04 Apr 2025 13:45	W	ICE	2	X								
66	0021_SW036_250403	03 Apr 2025 10:00	W	ICE	2	X								
67	0021_SW036_250404	04 Apr 2025 10:20	W	ICE	2		X							
68	0021_SW037_250407	07 Apr 2025 08:36	W	ICE	2		X							EXTRA SAMPLE FOR LAB QC
69	0021_SW040_250401	01 Apr 2025 16:25	W	ICE	2		X							
70	0021_SW043_250401	01 Apr 2025 14:02	W	ICE	2	X								
71	0021_SW044_250401	01 Apr 2025 12:51	W	ICE	2	X								
72	0021_SW045_250401	01 Apr 2025 11:52	W	ICE	2	X								
73	0021_SW048_250403	03 Apr 2025 15:30	W	ICE	2	X								
74	0021_SW051_250403	03 Apr 2025	W	ICE	2	X								
75	0021_SW052_250401	01 Apr 2025 13:42	W	ICE	2	X								
76	0021_SW053_250401	01 Apr 2025 13:19	W	ICE	2	X								
77	0021_SW056_250401	01 Apr 2025 14:30	W	ICE	2	X								
78	0021_SW057_250401	01 Apr 2025	W	ICE	2	X								
79	0021_SW058_250401	01 Apr 2025 12:30	W	ICE	2	X								
80	0021_SW059_250404	04 Apr 2025 14:41	W	ICE	2	X								
1	0021_SW060_250401	01 Apr 2025 09:26	W	ICE	2	X								
2	0021_SW062_250402	02 Apr 2025	W	ICE	2	X								
3	0021_SW064_250402	02 Apr 2025	W	ICE	2	X								
4	0021_SW066_250401	01 Apr 2025 09:55	W	ICE	2	X								
5	0021_SW069_250401	01 Apr 2025	W	ICE	2	X								
6	0021_SW075_250402	02 Apr 2025 09:55	W	ICE	2	X								
7	0021_SW078_250402	02 Apr 2025 09:30	W	ICE	2	X								
8	0021_SW079_250402	02 Apr 2025 09:54	W	ICE	2	X								
9	0021_SW080_250402	02 Apr 2025 09:22	W	ICE	2	X								
10	0021_SW083_250404	04 Apr 2025 10:45	W	ICE	2	X								
11	0021_SW085_250401	01 Apr 2025 10:40	W	ICE	2	X								
12	0021_SW110_250403	03 Apr 2025 12:10	W	ICE	2	X								
13	0021_SW112_250403	03 Apr 2025 11:40	W	ICE	2	X								
14	0021_SW126_250403	03 Apr 2025 14:08	W	ICE	2	X								EXTRA SAMPLE FOR LAB QC
15	0021_SW137_250401	01 Apr 2025 14:02	W	ICE	2	X								EXTRA SAMPLE FOR LAB QC
16	0021_SW139_250403	03 Apr 2025 14:44	W	ICE	2	X								
17	0021_SW150_250331	31 Mar 2025 16:06	W	ICE	2	X								EXTRA SAMPLE FOR LAB QC
18	0021_SW198_250403	03 Apr 2025 08:09	W	ICE	2	X								
19	0021_SW211_250403	03 Apr 2025 08:09	W	ICE	2	X								
20	0021_SW212_250404	04 Apr 2025 11:08	W	ICE	2	X								
21	0021_QC300_250401	1/04/2025	W	ICE	2	X								
22	0021_QC301_250402	2/04/2025	W	ICE	2	X								
23	0021_QC302_250401	1/04/2025	W	ICE	2	X								
24	0021_QC303_250401	1/04/2025	W	ICE	2	X								
25	0021_QC302_250402	2/04/2025	W	ICE	2	X								
26	0021_QC303_250402	2/04/2025	W	ICE	2	X								
27	0021_QC304_250402	2/04/2025	W	ICE	2	X								
28	0021_QC305_250402	2/04/2025	W	ICE	2	X								
29	0021_QC301_250401	1/04/2025	W	ICE	2	X								
30	0021_QC302_250402	2/04/2025	W	ICE	2	X								
31	0021_QC302_250402	2/04/2025	W	ICE	2	X								
32	0021_QC304_250403	3/04/2025	W	ICE	2	X								
33	0021_QC305_250404	4/04/2025	W	ICE	2	X								
34	0021_QC306_250404	4/04/2025	W	ICE	2	X								
35	0021_QC307_250407	7/04/2025	W	ICE	2	X								
36	0021_QC301_250403	3/04/2025	W	ICE	2	X								
37	0021_QC303_250404	4/04/2025	W	ICE	2	X								
38	0021_QC303_250407	7/04/2025	W	ICE	2	X								

CHAIN OF CUSTODY

ALS Environmental

CLIENT:	TURNAROUND REQUIREMENT: ☐ Standard TAT (List due date):	LABORATORY USE ONLY (Cont'd)
OFFICE:	(Standard TAT may be longer for some tests e.g. Dioxin/Furan and Hydrocarbons) ☐ Non-Standard or urgent TAT (List due date):	
PROJECT:	ALS QUOTE NO.:	COC SEQUENCE NUMBER (Circle)
ORDER NUMBER:		COC: 1 2 3 4 5 6 7
PROJECT MANAGER:	CONTACT PH:	OR: 1 2 3 4 5 6 7
SAMPLER:	SAMPLER MOBILE:	
COC emailed to ALS? (YES / NO)	EDD FORMAT (or default):	
Email Reports to:		

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
DATE/TIME:	DATE/TIME:	DATE/TIME:	DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

ALS USE ONLY	SAMPLE DETAILS (MATRIX: SOIL/SOLID, WATER, OTHER)			COC / ALS NT INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to ensure correct analysis) Where Metals are required, specify Total (unfiltered) or Dissolved (field filtered)							
LAB ID	SAMPLE ID	Date and Time	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL CONTAINERS	EPOCFA (PFAS Full Suite)	PFAS - Short Target Volume Long Suite (EPA537.1-ISOT)				HOLD		
37	0921_QC502_250401	1/04/2025	W	ICE	3	X							
38	0921_QC502_250401	1/04/2025	W	ICE	3						X		
41	0921_QC505_250331	31/03/2025	W	ICE	3	X							
42	0921_QC505_250331	31-Mar	W	ICE	3						X		

eurofins | mgt

☐ Sydney
Unit F3 - 6 Building F, 16 Mars Road, Lane Cove
Phone: +612 9900 8400
Email: enviro.syd@mgtlabmark.com.au

☐ Brisbane
Unit 1-21 Smallwood Place, Murrarie
Phone: +617 3902 4600
Email: enviro.bris@mgtlabmark.com.au

☐ Melbourne
2 Kingston Town Close, Oakleigh, VIC 3166
Phone: +613 8564 5000 Fax: +613 8564 5090
Email: enquiries.mel@mgtlabmark.com.au

CHAIN OF CUSTODY RECORD

CLIENT DETAILS

Company Name : GHD Pty Ltd	Contact Name : Daniel Mayberry, 0411 370 488	Purchase Order :	COC Number :
Office Address :	Project Manager : Helen Millar / Adam Simpo	PROJECT Number : 12626622	Eurofins | mgt quote ID :
Level 13, 133 Castlereagh Street, Sydney NSW 2000	Email for results : daniel.mayberry@ghd.com; karen.miller@ghd.com; ghdlabreports@ghd.com	PROJECT Name : ACT_0021_PFASOMP_25	Data output format: ESDAT

Special Directions & Comments :

Forwarded from ALS

Eurofins | mgt DI water batch number:

Analytes

	Sample ID	Date	Matrix	PFAS Extended Suite - 30 PFAS	PFAS Extended Suite - 30 PFAS - Aqueous TRL's	HOLD
1	0021_QC202_250331	31 Mar 2025 16:00	W	x		
2	0021_QC203_250401	01 Apr 2025 08:55	W	x		
3	0021_QC204_250401	01 Apr 2025 13:42	W	x		
4	0021_QC205_250401	01 Apr 2025	W	x		
5	0021_QC206_250402	02 Apr 2025 09:30	W	x		
6	0021_QC208_250403	03 Apr 2025 12:15	W		x	
7	0021_QC209_250404	04 Apr 2025 09:30	W	x		
8	0021_QC210_250404	04 Apr 2025 10:45	S	x		
9	0021_QC211_250404	04 Apr 2025 16:25	S	x		
10	0021_QC234_250401	01 Apr 2025 15:45	W	x		
11	0021_QC235_250402	02 Apr 2025	W	x		
12	0021_QC236_250402	02 Apr 2025	S	x		
13	0021_QC239_250403	03 Apr 2025 14:20	S	x		
14	0021_QC240_250404	04 Apr 2025 08:58	W	x		
15	0021_QC241_250404	04 Apr 2025 13:28	S	x		
16	0021_QC254_250402	02 Apr 2025 09:32	W	x		
17	0021_QC255_250403	03 Apr 2025 09:24	W	x		
18	0021_QC256_250403	03 Apr 2025 12:01	W	x		
19	0021_QC257_250407	07 Apr 2025 12:24	W	x		

Some common holding times (with correct preservation).
For further information contact the lab

Waters		Soils	
BTEX, MAH, VOC	14 days	BTEX, MAH, VOC	14 days
TRH, PAH, Phenols, Pesticides	7 days	TRH, PAH, Phenols, Pesticides	14 days
Heavy Metals	6 months	Heavy Metals	6 months
Mercury, CrVI	28 days	Mercury, CrVI	28 days
Microbiological testing	24 hours	Microbiological testing	72 hours
BOD, Nitrate, Nitrite, Total N	2 days	Anions	28 days
Solids - TSS, TDS etc	7 days	SPOCAS, pH Field and FOX, CrS	24 hours
Ferrous Iron	7 days	ASLP, TCLP	7 days

Containers:							Sample comments:
500P	250P	60P	tLA	40mL vial	250mL A	Jar	Bag	
								2x Containers
								2x Containers
								2x Containers
								2x Containers
								2x Containers
								2x Containers
								2x Containers
								1x Containers
								1x Containers
								2x Containers
								2x Containers
								2x Containers
								1x Containers
								1x Containers
								2x Containers
								1x Containers
								2x Containers
								2x Containers
								2x Containers
								2x Containers

Relinquished by: Andrew Duval (GHD)

Date & Time : 7/4/2025

Signature: A.Duval

Turn around time

1 DAY ☐ 2 DAY ☐ 3 DAY ☐

5 DAY ☐ 10 DAY ☐ Other:

Method Of Shipment

☐ Courier
☐ Hand Delivered
☐ Postal

Courier Consignment # :

Temperature on arrival:

Report number:

SAMPLE RECEIPT INFORMATION & BOTTLE TYPE

To be completed by Sample Receipt

WORKORDER No:

Courier Details (Mandatory for Quarantine)

Sorting Times	**Temperature Details**	**Packaging**		
(Only record for BP, Mobil)	Sample Temp:	**Security Seal Intact?**	**Packaging Type**	**No.**
Time Sorting Commenced:	Reading: 5·1	**Tick below**	Hard Esky	7(L)
	Reading- 5·0	☐ **YES** (Security seal intact)	Foam Esky	
Time Placed in Fridge:	Reading- 3·2	☐ **NO** (Security seal broken)	Box / bag	
	Average reading ……°C	☑ **N/A** (No security seal used)	By Hand	
Sorting to Fridge Target Time	Chilling Method:		Other	
< 1 hour	☐ Ice ☐ Ice Bricks ☐ No Chilling			

Carrier (circle): TOLL TNT ATC AaE/Startrack Aust Post

Other (specify)

Con Note:

ASS bags placed in freezer: ☐ No ☐ Yes ☑ N/A

Samples required for LTS: ☑ No ☐ Yes - use LTS trays and inform samples.sydney

Sample Receipt Advice Comments - To be completed by Sorting Staff

VOC analysis may be compromised as sample containers contained **headspace** (list sample numbers):

Details of any samples **damaged** during transit:

Other Information (eg. Were bottles received that weren't completely filled) (eg. If sample temperature is above 6°C add further detail here - Internal use only - Not for SRN):

TVC 244 - 250.

Samples checked, labelled and put in trays by:

Esky Location:

☐ Mobile Coolroom

☐ Trolley (specify colour)

☐ SR bench

☐ SR fridge

☐ Other (specify)

Tray Numbers:

SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order : **ES2510623**

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	: 12626622	Page	: 1 of 4
Order number	: 12626622	Quote number	: ES2023GHDSER0026 (ES23GHDSER0026)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: ----		
Sampler	: Jarrad Mawbey		

Dates

Date Samples Received	: 08-Apr-2025 14:20	Issue Date	: 11-Apr-2025
Client Requested Due Date	: 17-Apr-2025	Scheduled Reporting Date	: **17-Apr-2025**

Delivery Details

Mode of Delivery	: Undefined	Security Seal	: Not Available
No. of coolers/boxes	: 7	Temperature	: 5.1, 5.0, 3.2°C - Ice present
Receipt Detail	:	No. of samples received / analysed	: 42 / 40

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
- Split workorder - Remaining samples have been logged under ES2510113 and ES2510622.
- **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	(On Hold) SOIL No analysis requested	SOIL - EP231X (solids) PFAS - Full Suite (30 analytes)
ES2510623-041	31-Mar-2025 00:00	0021_QC505_250331		✓
ES2510623-042	31-Mar-2025 00:00	0021_QC506_250331	✓	

Matrix: **WATER**

Laboratory sample ID	Sampling date / time	Sample ID	(On Hold) WATER No analysis requested	WATER - EP231X PFAS - Full Suite (31 analytes)
ES2510623-001	01-Apr-2025 09:26	0021_SW060_250401		✓
ES2510623-002	02-Apr-2025 00:00	0021_SW062_250402		✓
ES2510623-003	02-Apr-2025 00:00	0021_SW064_250402		✓
ES2510623-004	01-Apr-2025 08:55	0021_SW068_250401		✓
ES2510623-005	01-Apr-2025 00:00	0021_SW069_250401		✓
ES2510623-006	02-Apr-2025 09:55	0021_SW076_250402		✓
ES2510623-007	02-Apr-2025 09:30	0021_SW078_250402		✓
ES2510623-008	02-Apr-2025 08:54	0021_SW079_250402		✓
ES2510623-009	02-Apr-2025 08:22	0021_SW080_250402		✓
ES2510623-010	04-Apr-2025 10:45	0021_SW083_250404		✓
ES2510623-011	01-Apr-2025 10:40	0021_SW085_250401		✓
ES2510623-012	03-Apr-2025 12:10	0021_SW110_250403		✓
ES2510623-013	03-Apr-2025 11:40	0021_SW112_250403		✓
ES2510623-014	03-Apr-2025 14:08	0021_SW126_250403		✓
ES2510623-015	01-Apr-2025 14:02	0021_SW127_250401		✓
ES2510623-016	03-Apr-2025 14:44	0021_SW130_250403		✓
ES2510623-017	31-Mar-2025 16:00	0021_SW153_250331		✓
ES2510623-018	03-Apr-2025 08:09	0021_SW188_250403		✓
ES2510623-019	03-Apr-2025 09:09	0021_SW211_250403		✓

			(On Hold) WATER No analysis requested	WATER - EP231X PFAS - Full Suite (31 analytes)
ES2510623-020	04-Apr-2025 11:00	0021_SW212_250404		✓
ES2510623-021	01-Apr-2025 00:00	0021_QC300_250401		✓
ES2510623-022	02-Apr-2025 00:00	0021_QC301_250402		✓
ES2510623-023	03-Apr-2025 00:00	0021_QC302_250403		✓
ES2510623-024	01-Apr-2025 00:00	0021_QC331_250401		✓
ES2510623-025	02-Apr-2025 00:00	0021_QC332_250402		✓
ES2510623-026	03-Apr-2025 00:00	0021_QC333_250403		✓
ES2510623-027	04-Apr-2025 00:00	0021_QC334_250404		✓
ES2510623-028	07-Apr-2025 00:00	0021_QC335_250407		✓
ES2510623-029	01-Apr-2025 00:00	0021_QC351_250401		✓
ES2510623-030	02-Apr-2025 00:00	0021_QC352_250402		✓
ES2510623-031	02-Apr-2025 00:00	0021_QC353_250402		✓
ES2510623-032	03-Apr-2025 00:00	0021_QC354_250403		✓
ES2510623-033	04-Apr-2025 00:00	0021_QC355_250404		✓
ES2510623-034	04-Apr-2025 00:00	0021_QC356_250404		✓
ES2510623-035	07-Apr-2025 00:00	0021_QC357_250407		✓
ES2510623-036	03-Apr-2025 00:00	0021_QC381_250403		✓
ES2510623-037	04-Apr-2025 00:00	0021_QC382_250404		✓
ES2510623-038	07-Apr-2025 00:00	0021_QC383_250407		✓
ES2510623-039	01-Apr-2025 00:00	0021_QC502_250401		✓
ES2510623-040	01-Apr-2025 00:00	0021_QC503_250401	✓	

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

CERTIFICATE OF ANALYSIS

Work Order	: **ES2510623**	Page	: 1 of 21
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	: 12626622	Date Samples Received	: 08-Apr-2025 14:20
Order number	: 12626622	Date Analysis Commenced	: 14-Apr-2025
C-O-C number	: ----	Issue Date	: 22-Apr-2025 15:05
Sampler	: Jarrad Mawbey		
Site	: ----		
Quote number	: ES23GHDSER0026		
No. of samples received	: 42		
No. of samples analysed	: 40		

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 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_QC505_250331	----	----	----	----
				Sampling date / time	31-Mar-2025 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2510623-041	--------	--------	--------	--------
					Result	----	----	----	----
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg		<0.0002	----	----	----	----
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg		<0.001	----	----	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg		<0.0005	----	----	----	----
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg		<0.0002	----	----	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg		<0.0005	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	0021_QC505_250331	----	----	----	----
				Sampling date / time	31-Mar-2025 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2510623-041	--------	--------	--------	--------
					Result	----	----	----	----
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg		<0.0005	----	----	----	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg		<0.0005	----	----	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg		<0.0005	----	----	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg		<0.0002	----	----	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg		<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	----	----	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg		<0.0005	----	----	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg		<0.0005	----	----	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg		<0.0005	----	----	----	----
EP231P: PFAS Sums									
Sum of PFAS	----	0.0002	mg/kg		<0.0002	----	----	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg		<0.0002	----	----	----	----
Sum of PFAS (WA DER List)	----	0.0002	mg/kg		<0.0002	----	----	----	----
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		**106**	----	----	----	----
13C8-PFOA	----	0.0002	%		**110**	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_SW060_250401	0021_SW062_250402	0021_SW064_250402	0021_SW068_250401	0021_SW069_250401
				Sampling date / time	01-Apr-2025 09:26	02-Apr-2025 00:00	02-Apr-2025 00:00	01-Apr-2025 08:55	01-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2510623-001	ES2510623-002	ES2510623-003	ES2510623-004	ES2510623-005
					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		<0.01	<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_SW060_250401	0021_SW062_250402	0021_SW064_250402	0021_SW068_250401	0021_SW069_250401
				Sampling date / time	01-Apr-2025 09:26	02-Apr-2025 00:00	02-Apr-2025 00:00	01-Apr-2025 08:55	01-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2510623-001	ES2510623-002	ES2510623-003	ES2510623-004	ES2510623-005
					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		<0.01	<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	%		**99.9**	**100**	**101**	**105**	**94.2**
13C8-PFOA	----	0.02	%		**95.2**	**95.4**	**98.9**	**93.3**	**97.3**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_SW076_250402	0021_SW078_250402	0021_SW079_250402	0021_SW080_250402	0021_SW083_250404
				Sampling date / time	02-Apr-2025 09:55	02-Apr-2025 09:30	02-Apr-2025 08:54	02-Apr-2025 08:22	04-Apr-2025 10:45
Compound	CAS Number	LOR	Unit		ES2510623-006	ES2510623-007	ES2510623-008	ES2510623-009	ES2510623-010
					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		<0.01	<0.01	**0.02**	**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	**0.04**	**0.02**	<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_SW076_250402	0021_SW078_250402	0021_SW079_250402	0021_SW080_250402	0021_SW083_250404
				Sampling date / time	02-Apr-2025 09:55	02-Apr-2025 09:30	02-Apr-2025 08:54	02-Apr-2025 08:22	04-Apr-2025 10:45
Compound	CAS Number	LOR	Unit		ES2510623-006	ES2510623-007	ES2510623-008	ES2510623-009	ES2510623-010
					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		<0.01	<0.01	**0.06**	**0.03**	<0.01
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		<0.01	<0.01	**0.06**	**0.03**	<0.01
Sum of PFAS (WA DER List)	----	0.01	µg/L		<0.01	<0.01	**0.06**	**0.03**	<0.01
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**95.6**	**101**	**98.9**	**101**	**91.2**
13C8-PFOA	----	0.02	%		**98.6**	**98.1**	**92.8**	**90.7**	**92.5**

Analytical Results

Sub-Matrix: WATER
(Matrix: WATER)

Compound	CAS Number	LOR	Unit	Sample ID	0021_SW085_250401	0021_SW110_250403	0021_SW112_250403	0021_SW126_250403	0021_SW127_250401
				Sampling date / time	01-Apr-2025 10:40	03-Apr-2025 12:10	03-Apr-2025 11:40	03-Apr-2025 14:08	01-Apr-2025 14:02
					ES2510623-011	ES2510623-012	ES2510623-013	ES2510623-014	ES2510623-015
					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	**0.26**	**0.05**
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		<0.02	**0.02**	<0.02	**0.33**	**0.09**
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		<0.01	**0.29**	**0.08**	**3.18**	**1.33**
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		<0.02	<0.02	<0.02	**0.12**	**0.06**
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		<0.01	**0.31**	**0.07**	**2.48**	**2.06**
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	**0.30**	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		<0.02	**0.07**	<0.02	**0.74**	**0.15**
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		<0.02	<0.02	<0.02	**0.12**	<0.02
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		<0.01	**0.01**	<0.01	**0.17**	**0.04**
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_SW085_250401	0021_SW110_250403	0021_SW112_250403	0021_SW126_250403	0021_SW127_250401
				Sampling date / time	01-Apr-2025 10:40	03-Apr-2025 12:10	03-Apr-2025 11:40	03-Apr-2025 14:08	01-Apr-2025 14:02
Compound	CAS Number	LOR	Unit		ES2510623-011	ES2510623-012	ES2510623-013	ES2510623-014	ES2510623-015
					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	**0.70**	**0.15**	**7.89**	**3.78**
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		<0.01	**0.60**	**0.15**	**5.66**	**3.39**
Sum of PFAS (WA DER List)	----	0.01	µg/L		<0.01	**0.68**	**0.15**	**7.35**	**3.63**
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**96.8**	**94.0**	**96.0**	**95.2**	**96.2**
13C8-PFOA	----	0.02	%		**96.0**	**96.2**	**98.7**	**99.3**	**93.7**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_SW130_250403	0021_SW153_250331	0021_SW188_250403	0021_SW211_250403	0021_SW212_250404
				Sampling date / time	03-Apr-2025 14:44	31-Mar-2025 16:00	03-Apr-2025 08:09	03-Apr-2025 09:09	04-Apr-2025 11:00
Compound	CAS Number	LOR	Unit		ES2510623-016	ES2510623-017	ES2510623-018	ES2510623-019	ES2510623-020
					Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		**0.06**	**0.03**	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		**0.08**	**0.04**	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		**1.00**	**0.69**	**0.01**	<0.01	<0.01
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		**0.04**	**0.03**	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		**1.43**	**1.16**	<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		**0.06**	**0.02**	<0.02	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		**0.25**	**0.08**	<0.02	<0.02	<0.02
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		**0.03**	<0.02	<0.02	<0.02	<0.02
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		**0.04**	**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_SW130_250403	0021_SW153_250331	0021_SW188_250403	0021_SW211_250403	0021_SW212_250404
				Sampling date / time	03-Apr-2025 14:44	31-Mar-2025 16:00	03-Apr-2025 08:09	03-Apr-2025 09:09	04-Apr-2025 11:00
Compound	CAS Number	LOR	Unit		ES2510623-016	ES2510623-017	ES2510623-018	ES2510623-019	ES2510623-020
					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		**2.99**	**2.07**	**0.01**	<0.01	<0.01
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		**2.43**	**1.85**	**0.01**	<0.01	<0.01
Sum of PFAS (WA DER List)	----	0.01	µg/L		**2.87**	**2.00**	**0.01**	<0.01	<0.01
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**92.0**	**91.4**	**93.5**	**97.3**	**94.5**
13C8-PFOA	----	0.02	%		**98.5**	**101**	**100**	**100**	**104**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_QC300_250401	0021_QC301_250402	0021_QC302_250403	0021_QC331_250401	0021_QC332_250402
				Sampling date / time	01-Apr-2025 00:00	02-Apr-2025 00:00	03-Apr-2025 00:00	01-Apr-2025 00:00	02-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2510623-021	ES2510623-022	ES2510623-023	ES2510623-024	ES2510623-025
					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_QC300_250401	0021_QC301_250402	0021_QC302_250403	0021_QC331_250401	0021_QC332_250402
				Sampling date / time	01-Apr-2025 00:00	02-Apr-2025 00:00	03-Apr-2025 00:00	01-Apr-2025 00:00	02-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2510623-021	ES2510623-022	ES2510623-023	ES2510623-024	ES2510623-025
					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		<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	%		**94.8**	**102**	**98.0**	**96.1**	**89.4**
13C8-PFOA	----	0.02	%		**103**	**103**	**101**	**100**	**101**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_QC333_250403	0021_QC334_250404	0021_QC335_250407	0021_QC351_250401	0021_QC352_250402
				Sampling date / time	03-Apr-2025 00:00	04-Apr-2025 00:00	07-Apr-2025 00:00	01-Apr-2025 00:00	02-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2510623-026	ES2510623-027	ES2510623-028	ES2510623-029	ES2510623-030
					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	<0.02	<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_QC333_250403	0021_QC334_250404	0021_QC335_250407	0021_QC351_250401	0021_QC352_250402
				Sampling date / time	03-Apr-2025 00:00	04-Apr-2025 00:00	07-Apr-2025 00:00	01-Apr-2025 00:00	02-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2510623-026	ES2510623-027	ES2510623-028	ES2510623-029	ES2510623-030
					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	<0.01	<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	%		**98.0**	**97.8**	**94.2**	**100**	**95.6**
13C8-PFOA	----	0.02	%		**102**	**103**	**102**	**100**	**101**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_QC353_250402	0021_QC354_250403	0021_QC355_250404	0021_QC356_250404	0021_QC357_250407
				Sampling date / time	02-Apr-2025 00:00	03-Apr-2025 00:00	04-Apr-2025 00:00	04-Apr-2025 00:00	07-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2510623-031	ES2510623-032	ES2510623-033	ES2510623-034	ES2510623-035
					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_QC353_250402	0021_QC354_250403	0021_QC355_250404	0021_QC356_250404	0021_QC357_250407
				Sampling date / time	02-Apr-2025 00:00	03-Apr-2025 00:00	04-Apr-2025 00:00	04-Apr-2025 00:00	07-Apr-2025 00:00
Compound	CAS Number	LOR	Unit		ES2510623-031	ES2510623-032	ES2510623-033	ES2510623-034	ES2510623-035
					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		<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	%		**94.9**	**97.4**	**98.2**	**92.8**	**94.6**
13C8-PFOA	----	0.02	%		**101**	**102**	**99.7**	**103**	**102**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_QC381_250403	0021_QC382_250404	0021_QC383_250407	0021_QC502_250401	----
				Sampling date / time	03-Apr-2025 00:00	04-Apr-2025 00:00	07-Apr-2025 00:00	01-Apr-2025 00:00	----
Compound	CAS Number	LOR	Unit		ES2510623-036	ES2510623-037	ES2510623-038	ES2510623-039	--------
					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	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		<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	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		<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	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L		<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	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		<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	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		<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	----
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L		<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	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L		<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	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L		<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	----
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L		<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	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_QC381_250403	0021_QC382_250404	0021_QC383_250407	0021_QC502_250401	----
				Sampling date / time	03-Apr-2025 00:00	04-Apr-2025 00:00	07-Apr-2025 00:00	01-Apr-2025 00:00	----
Compound	CAS Number	LOR	Unit		ES2510623-036	ES2510623-037	ES2510623-038	ES2510623-039	--------
					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	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L		<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	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L		<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	----
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	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L		<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	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L		<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	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		<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	----
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**95.3**	**99.2**	**101**	**98.0**	----
13C8-PFOA	----	0.02	%		**101**	**104**	**101**	**102**	----

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	: **ES2510623**	Page	: 1 of 10
Client	: **GHD PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MS HELEN MILNE	Telephone	: +61-2-8784 8555
Project	: 12626622	Date Samples Received	: 08-Apr-2025
Site	: ----	Issue Date	: 22-Apr-2025
Sampler	: Jarrad Mawbey	No. of samples received	: 42
Order number	: 12626622	No. of samples analysed	: 40

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	ES2510538--001	Anonymous	**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	ES2510623--015	0021_SW127_250401	**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	ES2510623--015	0021_SW127_250401	**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: **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	4	58	6.90	10.00	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)						
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	58	3.45	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 / *Container* / Client Sample ID(s)	*Sample Date*	*Extraction / Preparation*			*Analysis*		
		Date extracted	*Due for extraction*	*Evaluation*	*Date analysed*	*Due for analysis*	*Evaluation*
EP231A: Perfluoroalkyl Sulfonic Acids							
HDPE Soil Jar (EP231X)							
0021_QC505_250331	**31-Mar-2025**	**14-Apr-2025**	27-Sep-2025	✓	**16-Apr-2025**	24-May-2025	✓
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE Soil Jar (EP231X)							
0021_QC505_250331	**31-Mar-2025**	**14-Apr-2025**	27-Sep-2025	✓	**16-Apr-2025**	24-May-2025	✓

Matrix: **SOIL**

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
EP231C: Perfluoroalkyl Sulfonamides							
HDPE Soil Jar (EP231X) 0021_QC505_250331	**31-Mar-2025**	**14-Apr-2025**	27-Sep-2025	✓	**16-Apr-2025**	24-May-2025	✓
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE Soil Jar (EP231X) 0021_QC505_250331	**31-Mar-2025**	**14-Apr-2025**	27-Sep-2025	✓	**16-Apr-2025**	24-May-2025	✓
EP231P: PFAS Sums							
HDPE Soil Jar (EP231X) 0021_QC505_250331	**31-Mar-2025**	**14-Apr-2025**	27-Sep-2025	✓	**16-Apr-2025**	24-May-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 / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231A: Perfluoroalkyl Sulfonic Acids							
HDPE (no PTFE) (EP231X)							
0021_QC502_250401	**01-Apr-2025**	**15-Apr-2025**	28-Sep-2025	✓	**17-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X)							
0021_SW060_250401, 0021_SW068_250401, 0021_SW069_250401, 0021_SW085_250401, 0021_SW127_250401, 0021_QC300_250401, 0021_QC331_250401, 0021_QC351_250401	**01-Apr-2025**	**15-Apr-2025**	28-Sep-2025	✓	**22-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X)							
0021_SW062_250402, 0021_SW064_250402, 0021_SW076_250402, 0021_SW078_250402, 0021_SW079_250402, 0021_SW080_250402, 0021_QC301_250402, 0021_QC332_250402, 0021_QC352_250402, 0021_QC353_250402	**02-Apr-2025**	**15-Apr-2025**	29-Sep-2025	✓	**22-Apr-2025**	29-Sep-2025	✓
HDPE (no PTFE) (EP231X)							
0021_QC381_250403	**03-Apr-2025**	**15-Apr-2025**	30-Sep-2025	✓	**17-Apr-2025**	30-Sep-2025	✓
HDPE (no PTFE) (EP231X)							
0021_SW110_250403, 0021_SW112_250403, 0021_SW126_250403, 0021_SW130_250403, 0021_SW188_250403, 0021_SW211_250403, 0021_QC302_250403, 0021_QC333_250403, 0021_QC354_250403	**03-Apr-2025**	**15-Apr-2025**	30-Sep-2025	✓	**22-Apr-2025**	30-Sep-2025	✓
HDPE (no PTFE) (EP231X)							
0021_QC382_250404	**04-Apr-2025**	**15-Apr-2025**	01-Oct-2025	✓	**17-Apr-2025**	01-Oct-2025	✓
HDPE (no PTFE) (EP231X)							
0021_SW083_250404, 0021_SW212_250404, 0021_QC334_250404, 0021_QC355_250404, 0021_QC356_250404	**04-Apr-2025**	**15-Apr-2025**	01-Oct-2025	✓	**22-Apr-2025**	01-Oct-2025	✓
HDPE (no PTFE) (EP231X)							
0021_QC357_250407, 0021_QC383_250407	**07-Apr-2025**	**15-Apr-2025**	04-Oct-2025	✓	**17-Apr-2025**	04-Oct-2025	✓
HDPE (no PTFE) (EP231X)							
0021_QC335_250407	**07-Apr-2025**	**15-Apr-2025**	04-Oct-2025	✓	**22-Apr-2025**	04-Oct-2025	✓
HDPE (no PTFE) (EP231X)							
0021_SW153_250331	**31-Mar-2025**	**15-Apr-2025**	27-Sep-2025	✓	**22-Apr-2025**	27-Sep-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
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE (no PTFE) (EP231X) 0021_QC502_250401	**01-Apr-2025**	**15-Apr-2025**	28-Sep-2025	✓	**17-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0021_SW060_250401, 0021_SW068_250401, 0021_SW069_250401, 0021_SW085_250401, 0021_SW127_250401, 0021_QC300_250401, 0021_QC331_250401, 0021_QC351_250401	**01-Apr-2025**	**15-Apr-2025**	28-Sep-2025	✓	**22-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0021_SW062_250402, 0021_SW064_250402, 0021_SW076_250402, 0021_SW078_250402, 0021_SW079_250402, 0021_SW080_250402, 0021_QC301_250402, 0021_QC332_250402, 0021_QC352_250402, 0021_QC353_250402	**02-Apr-2025**	**15-Apr-2025**	29-Sep-2025	✓	**22-Apr-2025**	29-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0021_QC381_250403	**03-Apr-2025**	**15-Apr-2025**	30-Sep-2025	✓	**17-Apr-2025**	30-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0021_SW110_250403, 0021_SW112_250403, 0021_SW126_250403, 0021_SW130_250403, 0021_SW188_250403, 0021_SW211_250403, 0021_QC302_250403, 0021_QC333_250403, 0021_QC354_250403	**03-Apr-2025**	**15-Apr-2025**	30-Sep-2025	✓	**22-Apr-2025**	30-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0021_QC382_250404	**04-Apr-2025**	**15-Apr-2025**	01-Oct-2025	✓	**17-Apr-2025**	01-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0021_SW083_250404, 0021_SW212_250404, 0021_QC334_250404, 0021_QC355_250404, 0021_QC356_250404	**04-Apr-2025**	**15-Apr-2025**	01-Oct-2025	✓	**22-Apr-2025**	01-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0021_QC357_250407, 0021_QC383_250407	**07-Apr-2025**	**15-Apr-2025**	04-Oct-2025	✓	**17-Apr-2025**	04-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0021_QC335_250407	**07-Apr-2025**	**15-Apr-2025**	04-Oct-2025	✓	**22-Apr-2025**	04-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0021_SW153_250331	**31-Mar-2025**	**15-Apr-2025**	27-Sep-2025	✓	**22-Apr-2025**	27-Sep-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
EP231C: Perfluoroalkyl Sulfonamides							
HDPE (no PTFE) (EP231X) 0021_QC502_250401	**01-Apr-2025**	**15-Apr-2025**	28-Sep-2025	✓	**17-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0021_SW060_250401, 0021_SW068_250401, 0021_SW069_250401, 0021_SW085_250401, 0021_SW127_250401, 0021_QC300_250401, 0021_QC331_250401, 0021_QC351_250401	**01-Apr-2025**	**15-Apr-2025**	28-Sep-2025	✓	**22-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0021_SW062_250402, 0021_SW064_250402, 0021_SW076_250402, 0021_SW078_250402, 0021_SW079_250402, 0021_SW080_250402, 0021_QC301_250402, 0021_QC332_250402, 0021_QC352_250402, 0021_QC353_250402	**02-Apr-2025**	**15-Apr-2025**	29-Sep-2025	✓	**22-Apr-2025**	29-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0021_QC381_250403	**03-Apr-2025**	**15-Apr-2025**	30-Sep-2025	✓	**17-Apr-2025**	30-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0021_SW110_250403, 0021_SW112_250403, 0021_SW126_250403, 0021_SW130_250403, 0021_SW188_250403, 0021_SW211_250403, 0021_QC302_250403, 0021_QC333_250403, 0021_QC354_250403	**03-Apr-2025**	**15-Apr-2025**	30-Sep-2025	✓	**22-Apr-2025**	30-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0021_QC382_250404	**04-Apr-2025**	**15-Apr-2025**	01-Oct-2025	✓	**17-Apr-2025**	01-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0021_SW083_250404, 0021_SW212_250404, 0021_QC334_250404, 0021_QC355_250404, 0021_QC356_250404	**04-Apr-2025**	**15-Apr-2025**	01-Oct-2025	✓	**22-Apr-2025**	01-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0021_QC357_250407, 0021_QC383_250407	**07-Apr-2025**	**15-Apr-2025**	04-Oct-2025	✓	**17-Apr-2025**	04-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0021_QC335_250407	**07-Apr-2025**	**15-Apr-2025**	04-Oct-2025	✓	**22-Apr-2025**	04-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0021_SW153_250331	**31-Mar-2025**	**15-Apr-2025**	27-Sep-2025	✓	**22-Apr-2025**	27-Sep-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
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE (no PTFE) (EP231X)							
0021_QC502_250401	**01-Apr-2025**	**15-Apr-2025**	28-Sep-2025	✓	**17-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X)							
0021_SW060_250401, 0021_SW068_250401, 0021_SW069_250401, 0021_SW085_250401, 0021_SW127_250401, 0021_QC300_250401, 0021_QC331_250401, 0021_QC351_250401	**01-Apr-2025**	**15-Apr-2025**	28-Sep-2025	✓	**22-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X)							
0021_SW062_250402, 0021_SW064_250402, 0021_SW076_250402, 0021_SW078_250402, 0021_SW079_250402, 0021_SW080_250402, 0021_QC301_250402, 0021_QC332_250402, 0021_QC352_250402, 0021_QC353_250402	**02-Apr-2025**	**15-Apr-2025**	29-Sep-2025	✓	**22-Apr-2025**	29-Sep-2025	✓
HDPE (no PTFE) (EP231X)							
0021_QC381_250403	**03-Apr-2025**	**15-Apr-2025**	30-Sep-2025	✓	**17-Apr-2025**	30-Sep-2025	✓
HDPE (no PTFE) (EP231X)							
0021_SW110_250403, 0021_SW112_250403, 0021_SW126_250403, 0021_SW130_250403, 0021_SW188_250403, 0021_SW211_250403, 0021_QC302_250403, 0021_QC333_250403, 0021_QC354_250403	**03-Apr-2025**	**15-Apr-2025**	30-Sep-2025	✓	**22-Apr-2025**	30-Sep-2025	✓
HDPE (no PTFE) (EP231X)							
0021_QC382_250404	**04-Apr-2025**	**15-Apr-2025**	01-Oct-2025	✓	**17-Apr-2025**	01-Oct-2025	✓
HDPE (no PTFE) (EP231X)							
0021_SW083_250404, 0021_SW212_250404, 0021_QC334_250404, 0021_QC355_250404, 0021_QC356_250404	**04-Apr-2025**	**15-Apr-2025**	01-Oct-2025	✓	**22-Apr-2025**	01-Oct-2025	✓
HDPE (no PTFE) (EP231X)							
0021_QC357_250407, 0021_QC383_250407	**07-Apr-2025**	**15-Apr-2025**	04-Oct-2025	✓	**17-Apr-2025**	04-Oct-2025	✓
HDPE (no PTFE) (EP231X)							
0021_QC335_250407	**07-Apr-2025**	**15-Apr-2025**	04-Oct-2025	✓	**22-Apr-2025**	04-Oct-2025	✓
HDPE (no PTFE) (EP231X)							
0021_SW153_250331	**31-Mar-2025**	**15-Apr-2025**	27-Sep-2025	✓	**22-Apr-2025**	27-Sep-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
EP231P: PFAS Sums							
HDPE (no PTFE) (EP231X) 0021_QC502_250401	**01-Apr-2025**	**15-Apr-2025**	28-Sep-2025	✓	**17-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0021_SW060_250401, 0021_SW068_250401, 0021_SW069_250401, 0021_SW085_250401, 0021_SW127_250401, 0021_QC300_250401, 0021_QC331_250401, 0021_QC351_250401	**01-Apr-2025**	**15-Apr-2025**	28-Sep-2025	✓	**22-Apr-2025**	28-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0021_SW062_250402, 0021_SW064_250402, 0021_SW076_250402, 0021_SW078_250402, 0021_SW079_250402, 0021_SW080_250402, 0021_QC301_250402, 0021_QC332_250402, 0021_QC352_250402, 0021_QC353_250402	**02-Apr-2025**	**15-Apr-2025**	29-Sep-2025	✓	**22-Apr-2025**	29-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0021_QC381_250403	**03-Apr-2025**	**15-Apr-2025**	30-Sep-2025	✓	**17-Apr-2025**	30-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0021_SW110_250403, 0021_SW112_250403, 0021_SW126_250403, 0021_SW130_250403, 0021_SW188_250403, 0021_SW211_250403, 0021_QC302_250403, 0021_QC333_250403, 0021_QC354_250403	**03-Apr-2025**	**15-Apr-2025**	30-Sep-2025	✓	**22-Apr-2025**	30-Sep-2025	✓
HDPE (no PTFE) (EP231X) 0021_QC382_250404	**04-Apr-2025**	**15-Apr-2025**	01-Oct-2025	✓	**17-Apr-2025**	01-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0021_SW083_250404, 0021_SW212_250404, 0021_QC334_250404, 0021_QC355_250404, 0021_QC356_250404	**04-Apr-2025**	**15-Apr-2025**	01-Oct-2025	✓	**22-Apr-2025**	01-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0021_QC357_250407, 0021_QC383_250407	**07-Apr-2025**	**15-Apr-2025**	04-Oct-2025	✓	**17-Apr-2025**	04-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0021_QC335_250407	**07-Apr-2025**	**15-Apr-2025**	04-Oct-2025	✓	**22-Apr-2025**	04-Oct-2025	✓
HDPE (no PTFE) (EP231X) 0021_SW153_250331	**31-Mar-2025**	**15-Apr-2025**	27-Sep-2025	✓	**22-Apr-2025**	27-Sep-2025	✓

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)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	10	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	10	10.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	10	10.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	10	10.00	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	4	58	6.90	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	2	58	3.45	5.00	×	NEPM 2013 B3 & ALS QC Standard

Brief Method Summaries

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

Analytical Methods	Method	Matrix	Method Descriptions
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	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	: **ES2510623**	Page	: 1 of 15
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	: 12626622	Date Samples Received	: 08-Apr-2025
Order number	: 12626622	Date Analysis Commenced	: 14-Apr-2025
C-O-C number	: ----	Issue Date	: 22-Apr-2025
Sampler	: Jarrad Mawbey		
Site	: ----		
Quote number	: ES23GHDSER0026		
No. of samples received	: 42		
No. of samples analysed	: 40		

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*
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 (%)
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 6508442)									
ES2510538-001	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	0.0014	0.0021	38.5	0% - 50%
		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	0.0083	0.0100	17.9	0% - 20%
		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: 6508442)									
ES2510538-001	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	0.0005	82.8	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	0.0003	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: 6508442)									
ES2510538-001	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

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report					
				LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 6508442) - continued									
ES2510538-001	Anonymous	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
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 6508442)									
ES2510538-001	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 sample ID	Sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report					
				LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 6510753)									
ES2510623-014	0021_SW126_250403	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	3.18	3.64	13.4	0% - 20%
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	2.48	2.68	7.9	0% - 20%
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	0.26	0.26	0.0	0% - 50%
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	0.33	0.31	4.7	0% - 50%
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	0.12	0.12	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
ES2510623-015	0021_SW127_250401	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	1.33	1.50	11.9	0% - 20%
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	2.06	1.99	3.4	0% - 20%
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	0.05	0.06	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	0.09	0.09	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	0.06	0.06	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: 6510755)									
ES2510623-018	0021_SW188_250403	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

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: 6510755) - continued									
ES2510623-018	0021_SW188_250403	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
ES2510623-020	0021_SW212_250404	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: 6510753)									
ES2510623-014	0021_SW126_250403	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	0.17	0.17	0.0	0% - 50%
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	0.30	0.27	8.4	0% - 50%
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	0.74	0.72	2.2	0% - 20%
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	0.12	0.13	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
ES2510623-015	0021_SW127_250401	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	0.04	0.05	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	0.15	0.16	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 6510755)									
ES2510623-018	0021_SW188_250403	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

Sub-Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report					
				LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 6510755) - continued									
ES2510623-018	0021_SW188_250403	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
ES2510623-020	0021_SW212_250404	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: 6510753)									
ES2510623-014	0021_SW126_250403	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
ES2510623-015	0021_SW127_250401	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

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: 6510753) - continued									
ES2510623-015	0021_SW127_250401	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: 6510755)									
ES2510623-018	0021_SW188_250403	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
ES2510623-020	0021_SW212_250404	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: 6510753)									
ES2510623-014	0021_SW126_250403	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 6510753) - continued									
ES2510623-014	0021_SW126_250403	EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
ES2510623-015	0021_SW127_250401	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: 6510755)									
ES2510623-018	0021_SW188_250403	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
ES2510623-020	0021_SW212_250404	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: 6510753)									
ES2510623-014	0021_SW126_250403	EP231X: Sum of PFAS	----	0.01	µg/L	7.89	8.49	7.3	0% - 20%
ES2510623-015	0021_SW127_250401	EP231X: Sum of PFAS	----	0.01	µg/L	3.78	3.93	3.9	0% - 20%
EP231P: PFAS Sums (QC Lot: 6510755)									
ES2510623-018	0021_SW188_250403	EP231X: Sum of PFAS	----	0.01	µg/L	0.01	0.01	0.0	No Limit
ES2510623-020	0021_SW212_250404	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit

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

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

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6508442)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	0.00125 mg/kg	86.4	72.0	128
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	102	73.0	123
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	88.6	67.0	130
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	99.4	70.0	132
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	103	68.0	136
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	109	59.0	134
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6508442)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	0.00625 mg/kg	100.0	71.0	135
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	103	69.0	132
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	85.4	70.0	132
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	86.0	71.0	131
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	115	69.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	95.6	72.0	129
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	0.00125 mg/kg	92.6	69.0	133
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	108	64.0	136
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	115	69.0	135
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	98.0	66.0	139
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	113	69.0	133
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6508442)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	107	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	111	69.8	131
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	109	68.7	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	114	65.1	134
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	92.5	63.0	144
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	84.4	61.0	139
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6508442)								

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6508442) - continued								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	0.00125 mg/kg	87.1	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	102	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	115	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	120	69.2	143

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6510753)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.25 µg/L	83.7	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.25 µg/L	92.2	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.25 µg/L	92.7	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	93.0	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.25 µg/L	81.3	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.25 µg/L	75.3	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6510755)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.25 µg/L	89.7	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.25 µg/L	93.0	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.25 µg/L	86.8	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	94.9	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.25 µg/L	87.0	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.25 µg/L	82.8	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6512707)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.25 µg/L	87.8	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.25 µg/L	95.9	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.25 µg/L	85.9	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	97.4	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.25 µg/L	79.7	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.25 µg/L	89.0	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6510753)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	87.4	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	86.5	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	86.0	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	97.9	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	90.4	71.0	133

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6510753) - continued								
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	83.1	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	83.9	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	88.1	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	93.7	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	80.3	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	99.1	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6510755)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	79.4	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	85.4	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	80.1	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	89.1	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	82.6	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	80.2	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	82.8	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	81.9	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	96.4	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	81.7	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	86.7	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6512707)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	89.1	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	91.9	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	86.2	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	86.6	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	85.0	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	87.9	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	91.6	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	80.4	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	97.6	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	99.0	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	95.0	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6510753)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	96.5	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	102	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	86.8	62.6	147

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6510753) - continued								
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	91.2	66.0	145
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	97.2	57.6	145
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	80.2	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	92.3	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6510755)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	83.6	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	92.5	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	89.2	62.6	147
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	91.5	66.0	145
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	90.3	57.6	145
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	89.5	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	85.3	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6512707)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	87.6	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	90.4	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	88.2	62.6	147
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	90.6	66.0	145
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	91.7	57.6	145
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	90.0	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	89.4	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6510753)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.25 µg/L	113	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	113	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	92.6	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	92.9	71.4	144
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6510755)								

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	LCS: Spike Recovery (%)	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6510755) - continued								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.25 µg/L	87.0	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.25 µg/L	90.5	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	91.1	67.0	138
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	0.25 µg/L	86.8	71.4	144
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6512707)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.25 µg/L	90.1	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	81.9	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	93.3	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	85.8	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**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6508442)							
ES2510538-001	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.00125 mg/kg	89.2	72.0	128
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.00125 mg/kg	97.2	73.0	123
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.00125 mg/kg	116	67.0	130
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.00125 mg/kg	98.2	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	106	59.0	134
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6508442)							
ES2510538-001	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.00625 mg/kg	97.8	71.0	135
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.00125 mg/kg	98.3	69.0	132
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.00125 mg/kg	106	70.0	132
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.00125 mg/kg	86.4	71.0	131
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.00125 mg/kg	109	69.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.00125 mg/kg	92.8	72.0	129
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.00125 mg/kg	93.0	69.0	133
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.00125 mg/kg	108	64.0	136
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.00125 mg/kg	123	69.0	135
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.00125 mg/kg	104	66.0	139
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.00312 mg/kg	118	69.0	133

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	Matrix Spike (MS) Report: SpikeRecovery(%) MS	Matrix Spike (MS) Report: Acceptable Limits (%) Low	Matrix Spike (MS) Report: Acceptable Limits (%) High
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6508442)							
ES2510538-001	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.00125 mg/kg	98.4	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.00312 mg/kg	110	71.6	129
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.00312 mg/kg	112	69.8	131
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.00312 mg/kg	106	68.7	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.00312 mg/kg	102	65.1	134
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.00125 mg/kg	86.0	63.0	144
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.00125 mg/kg	87.4	61.0	139
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6508442)							
ES2510538-001	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.00125 mg/kg	89.2	62.0	145
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.00125 mg/kg	100	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.00125 mg/kg	78.2	65.0	137
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.00125 mg/kg	108	69.2	143

Sub-Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	Matrix Spike (MS) Report: SpikeRecovery(%) MS	Matrix Spike (MS) Report: Acceptable Limits (%) Low	Matrix Spike (MS) Report: Acceptable Limits (%) High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6510753)							
ES2510623-015	0021_SW127_250401	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.25 µg/L	76.2	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.25 µg/L	89.6	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	86.4	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	69.8	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6510755)							
ES2510623-019	0021_SW211_250403	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.25 µg/L	78.6	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.25 µg/L	88.5	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.25 µg/L	89.2	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.25 µg/L	94.5	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.25 µg/L	81.4	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.25 µg/L	88.3	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6510753)							
ES2510623-015	0021_SW127_250401	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	87.5	73.0	129

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: 6510753) - continued							
ES2510623-015	0021_SW127_250401	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	91.9	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	89.3	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	93.3	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	88.4	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	84.4	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	79.4	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	86.6	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	100	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	86.8	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	108	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6510755)							
ES2510623-019	0021_SW211_250403	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	84.0	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	90.6	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	84.2	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	97.5	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	90.6	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	83.7	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	87.8	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	83.3	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	95.0	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	79.3	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	97.8	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6510753)							
ES2510623-015	0021_SW127_250401	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	108	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	93.8	62.6	147
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	86.3	66.0	145
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	92.3	57.6	145
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	82.8	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	91.1	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6510755)							
ES2510623-019	0021_SW211_250403	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	89.0	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	100	68.0	141

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: 6510755) - continued							
ES2510623-019	0021_SW211_250403	EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	93.2	62.6	147
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	84.8	66.0	145
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	97.1	57.6	145
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	89.9	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	91.5	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6510753)							
ES2510623-015	0021_SW127_250401	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.25 µg/L	89.3	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	109	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.25 µg/L	96.3	71.4	144
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6510755)							
ES2510623-019	0021_SW211_250403	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.25 µg/L	91.4	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.25 µg/L	88.2	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.25 µg/L	85.4	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.25 µg/L	97.7	71.4	144

CHAIN OF CUSTODY

ALS Laboratory: please tick →

CLIENT: GHD Pty Ltd	TURNAROUND REQUIREMENT: ☐ Standard TAT (List due date):	
OFFICE: Sydney	(Standard TAT may be longer for some tests e.g., Ultra Trace Organics) ☐ Non Standard or urgent TAT (List due date):	
PROJECT: ACT_0021_PFASOMP_25	ALS QUOTE NO.: ES25GHDSER0026	COC SEQUENCE NUMBER (Circle): COC: 1 2 3 4 5 6 7; SOF: 1 2 3 4 5 6 7
ORDER NUMBER: 12428622		
PROJECT MANAGER: Helen Milne / Adam Schipp	CONTACT PH: +61 410533025	
SAMPLER: Jarrad Mawbey	SAMPLER MOBILE: 0411 270 023	
COC emailed to ALS? (YES / NO)	EDD FORMAT (or default):	
Email Reports to: jarrad.mawbey@ghd.com; helen.milne@ghd.com; ghdlabreports@ghd.com		

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Jarrad Mawbey			
DATE/TIME: 24/4/2025 @2pm	DATE/TIME: 1/5/25 1430	DATE/TIME:	DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

LAB ID	SAMPLE ID	Date and Time	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL CONTAINERS	EP231X (PFAS Full Suite)	PFAS - Super Trace Waters Long Suite (EP231X-ST)	HOLD	Notes
1	0021_MW061_250424	24 Apr 2025	W	Ice	2	X			
2	0021_MW062_250424	24 Apr 2025	W	Ice	2	X			
3	0021_QC304_250424	24 Apr 2025	W	Ice	2	X			

Environmental Division
Sydney
Work Order Reference
ES2512435

Telephone : +61-2-8784 8555

SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order	: **ES2512435**		
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	: 12626622	Page	: 1 of 2
Order number	: 12626622	Quote number	: ES2023GHDSER0026 (ES23GHDSER0026)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: ----		
Sampler	: Jarrad Mawbey		

Dates

Date Samples Received	: 29-Apr-2025 08:00	Issue Date	: 01-May-2025
Client Requested Due Date	: 05-May-2025	Scheduled Reporting Date	: **05-May-2025**

Delivery Details

Mode of Delivery	: Carrier	Security Seal	: Intact.
No. of coolers/boxes	: 1	Temperature	: 9.4'C 8.8'C - Ice present
Receipt Detail	:	No. of samples received / analysed	: 3 / 3

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.**
- 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: **WATER**

Laboratory sample ID	Sampling date / time	Sample ID	WATER - EP231X PFAS - Full Suite (31 analytes)
ES2512435-001	24-Apr-2025 00:00	0021_MW061_250424	✓
ES2512435-002	24-Apr-2025 00:00	0021_MW062_250424	✓
ES2512435-003	24-Apr-2025 00:00	0021_QC304_250424	✓

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

CERTIFICATE OF ANALYSIS

Work Order	: **ES2512435**	Page	: 1 of 5
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	: 12626622	Date Samples Received	: 29-Apr-2025 08:00
Order number	: 12626622	Date Analysis Commenced	: 01-May-2025
C-O-C number	: ----	Issue Date	: 06-May-2025 11:02
Sampler	: Jarrad Mawbey		
Site	: ----		
Quote number	: ES23GHDSER0026		
No. of samples received	: 3		
No. of samples analysed	: 3		

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

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

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

Signatories

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

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

General Comments

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

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

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

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

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

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

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

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

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0021_MW061_250424	0021_MW062_250424	0021_QC304_250424	----	----
				Sampling date / time	24-Apr-2025 00:00	24-Apr-2025 00:00	24-Apr-2025 00:00	----	----
Compound	CAS Number	LOR	Unit		ES2512435-001	ES2512435-002	ES2512435-003	--------	--------
					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		**0.03**	**0.19**	<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		**0.07**	**0.63**	<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_MW061_250424	0021_MW062_250424	0021_QC304_250424	----	----
				Sampling date / time	24-Apr-2025 00:00	24-Apr-2025 00:00	24-Apr-2025 00:00	----	----
Compound	CAS Number	LOR	Unit		ES2512435-001	ES2512435-002	ES2512435-003	--------	--------
					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		**0.10**	**0.82**	<0.01	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		**0.10**	**0.82**	<0.01	----	----
Sum of PFAS (WA DER List)	----	0.01	µg/L		**0.10**	**0.82**	<0.01	----	----
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**95.7**	**99.7**	**96.5**	----	----
13C8-PFOA	----	0.02	%		**98.8**	**101**	**97.1**	----	----

Surrogate Control Limits

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	: **ES2512435**	Page	: 1 of 4
Amendment	: **1**		
Client	: **GHD PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MS HELEN MILNE	Telephone	: +61-2-8784 8555
Project	: 12626622	Date Samples Received	: 29-Apr-2025
Site	: ----	Issue Date	: 06-May-2025
Sampler	: Jarrad Mawbey	No. of samples received	: 3
Order number	: 12626622	No. of samples analysed	: 3

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.**
- **NO Matrix Spike outliers occur.**
- **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.**

Analysis Holding Time Compliance

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

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

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

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

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231A: Perfluoroalkyl Sulfonic Acids							
HDPE (no PTFE) (EP231X) 0021_MW061_250424, 0021_MW062_250424, 0021_QC304_250424	**24-Apr-2025**	**01-May-2025**	21-Oct-2025	✓	**01-May-2025**	21-Oct-2025	✓
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE (no PTFE) (EP231X) 0021_MW061_250424, 0021_MW062_250424, 0021_QC304_250424	**24-Apr-2025**	**01-May-2025**	21-Oct-2025	✓	**01-May-2025**	21-Oct-2025	✓
EP231C: Perfluoroalkyl Sulfonamides							
HDPE (no PTFE) (EP231X) 0021_MW061_250424, 0021_MW062_250424, 0021_QC304_250424	**24-Apr-2025**	**01-May-2025**	21-Oct-2025	✓	**01-May-2025**	21-Oct-2025	✓
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE (no PTFE) (EP231X) 0021_MW061_250424, 0021_MW062_250424, 0021_QC304_250424	**24-Apr-2025**	**01-May-2025**	21-Oct-2025	✓	**01-May-2025**	21-Oct-2025	✓
EP231P: PFAS Sums							
HDPE (no PTFE) (EP231X) 0021_MW061_250424, 0021_MW062_250424, 0021_QC304_250424	**24-Apr-2025**	**01-May-2025**	21-Oct-2025	✓	**01-May-2025**	21-Oct-2025	✓

Quality Control Parameter Frequency Compliance

- **No Quality Control data available for this section.**

Brief Method Summaries

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

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

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

QUALITY CONTROL REPORT

Work Order	: **ES2512435**	Page	: 1 of 3
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	: 12626622	Date Samples Received	: 29-Apr-2025
Order number	: 12626622	Date Analysis Commenced	: 01-May-2025
C-O-C number	: ----	Issue Date	: 06-May-2025
Sampler	: Jarrad Mawbey		
Site	: ----		
Quote number	: ES23GHDSER0026		
No. of samples received	: 3		
No. of samples analysed	: 3		

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

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

This Quality Control Report contains the following information:

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

Signatories

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

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

General Comments

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

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

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

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

Laboratory Duplicate (DUP) Report

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

- **No Laboratory Duplicate (DUP) Results are required to be reported.**

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

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

- **No Method Blank (MB) or Laboratory Control Spike (LCS) Results are required to be reported.**

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.

- **No Matrix Spike (MS) or Matrix Spike Duplicate (MSD) Results are required to be reported.**

CHAIN OF CUSTODY

ALS Environmental

ALS Laboratory: please tick →

☐ADELAIDE 21 Burma Road Pooraka SA 5095 Ph: 08 8359 0890 E: adelaide@alsglobal.com
☐BRISBANE 32 Shand Street Stafford QLD 4053 Ph: 07 3243 7222 E: samples.brisbane@alsglobal.com
☐GLADSTONE 46 Callemondah Drive Clinton QLD 4680 Ph: 07 7471 5600 E: gladstone@alsglobal.com
☐MACKAY 78 Harbour Road Mackay QLD 4740 Ph: 07 4944 0177 E: mackay@alsglobal.com
☐MELBOURNE 2-4 Westall Road Springvale VIC 3171 Ph: 03 8549 9600 E: samples.melbourne@alsglobal.com
☐MUDGEE 27 Sydney Road Mudgee NSW 2850 Ph: 02 6372 6735 E: mudgee.mail@alsglobal.com
☐NEWCASTLE 5 Rose Gum Road Warabrook NSW 2304 Ph: 02 4968 9433 E: samples.newcastle@alsglobal.com
☐NOWRA 4/13 Geary Place North Nowra NSW 2541 Ph: 024423 2063 E: nowra@alsglobal.com
☐PERTH 10 Hod Way Malaga WA 6090 Ph: 08 9209 7655 E: samples.perth@alsglobal.com
☐SYDNEY 277-289 Woodpark Road Smithfield NSW 2164 Ph: 02 8784 8555 E: samples.sydney@alsglobal.com
☐TOWNSVILLE 14-15 Desma Court Bohle QLD 4818 Ph: 07 4796 0600 E: townsville.environmental@alsglobal.com
☐WOLLONGONG 99 Kenny Street Wollongong NSW 2500 Ph: 02 4225 3125 E: portkembla@alsglobal.com

CLIENT: GHD Pty Ltd	TURNAROUND REQUIREMENT: ☐ Standard TAT (List due date):	STANDARD	FOR LABORATORY USE ONLY (Circle)
OFFICE: Sydney	(Standard TAT may be longer for some tests e.g., Ultra Trace Organics) ☐ Non Standard or urgent TAT (List due date):		Custody Seal Intact? Yes No N/A
PROJECT: ACT_0020_PFASOMP_25	ALS QUOTE NO.: ES23GHDSER0026	COC SEQUENCE NUMBER (Circle)	Free ice / frozen ice bricks present upon receipt? Yes No N/A
ORDER NUMBER: 12626622		COC: 1 2 3 4 5 6 7	Random Sample Temperature on Receipt: °C
PROJECT MANAGER: Helen Milne / Adam Schipp	CONTACT PH: +61 410533325	OF: 1 2 3 4 5 6 7	Other comment:

SAMPLER: Jarrad Mawbey	SAMPLER MOBILE: 0411 379 023	RELINQUISHED BY: Jarrad Mawbey	RECEIVED BY:	RELINQUISHED BY:
COC emailed to ALS? (YES / NO)	EDD FORMAT (or default):	DATE/TIME: 24/4/2025 @2pm	DATE/TIME: 29/4/25	DATE/TIME:
Email Reports to: jarrad.mawbey@ghd.com helen.milne@ghd.com ghdlabreports@ghd.com				RECEIVED BY:
				DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

ALS USE	SAMPLE DETAILS MATRIX: SOLID (S) WATER (W)			CONTAINER INFORMATION		*ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).								
LAB ID	SAMPLE ID	Date and Time	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL CONTAINERS	EP231X (PFAS Full Suite)						HOLD		Notes
	0020_MW069_250424	24/4/2025	W	Ice	2	X								
	0020_MW070_250424	24/4/2025	W	Ice	2	X								
	0020_MW071_250424	24/4/2025	W	Ice	2	X								
	0020_QC120_250424	24/4/2025	W	Ice	2	X								

Environmental Division Sydney
Work Order Reference
ES2512033

Telephone : +61-2-8784 8555

SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order : **ES2512752**

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	: 12626622	Page	: 1 of 3
Order number	: 12626622	Quote number	: ES2023GHDSER0026 (ES23GHDSER0026)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: ----		
Sampler	: Jarrad Mawbey		

Dates

Date Samples Received	: 29-Apr-2025 08:00	Issue Date	: 06-May-2025
Client Requested Due Date	: 06-May-2025	Scheduled Reporting Date	: **06-May-2025**

Delivery Details

Mode of Delivery	: Carrier	Security Seal	: Intact.
No. of coolers/boxes	: 1	Temperature	: 9.4'C, 8.8'C - Ice present
Receipt Detail	:	No. of samples received / analysed	: 4 / 4

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
- This workorder is to replace ES2512033
- **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: **WATER**

Laboratory sample ID	*Sampling date / time*	*Sample ID*	WATER - EP231X PFAS - Full Suite (31 analytes)
ES2512752-001	24-Apr-2025 00:00	0020_MW069_250424	✓
ES2512752-002	24-Apr-2025 00:00	0020_MW070_250424	✓
ES2512752-003	24-Apr-2025 00:00	0020_MW071_250424	✓
ES2512752-004	24-Apr-2025 00:00	0020_QC120_250424	✓

Proactive Holding Time Report

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

Requested Deliverables

ACCOUNTS PAYABLE

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

ANDREW DUVAL

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

GHD LAB REPORTS

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

HELEN MILNE

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

Jarrad Mawbey

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

SAM SATHISH

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

CERTIFICATE OF ANALYSIS

Work Order	: **ES2512752**	Page	: 1 of 5
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	: 12626622	Date Samples Received	: 29-Apr-2025 08:00
Order number	: 12626622	Date Analysis Commenced	: 05-May-2025
C-O-C number	: ----	Issue Date	: 06-May-2025 10:45
Sampler	: Jarrad Mawbey		
Site	: ----		
Quote number	: ES23GHDSER0026		
No. of samples received	: 4		
No. of samples analysed	: 4		

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 Organics, Smithfield, NSW

General Comments

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

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

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

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

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

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

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

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

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0020_MW069_250424	0020_MW070_250424	0020_MW071_250424	0020_QC120_250424	----
				Sampling date / time	24-Apr-2025 00:00	24-Apr-2025 00:00	24-Apr-2025 00:00	24-Apr-2025 00:00	----
Compound	CAS Number	LOR	Unit		ES2512752-001	ES2512752-002	ES2512752-003	ES2512752-004	--------
					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	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		**0.03**	**0.15**	<0.01	**0.13**	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		**0.06**	**0.50**	<0.01	**0.49**	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L		<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	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		<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	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		<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	----
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L		<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	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L		<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	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L		<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	----
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L		<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	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	0020_MW069_250424	0020_MW070_250424	0020_MW071_250424	0020_QC120_250424	----
				Sampling date / time	24-Apr-2025 00:00	24-Apr-2025 00:00	24-Apr-2025 00:00	24-Apr-2025 00:00	----
Compound	CAS Number	LOR	Unit		ES2512752-001	ES2512752-002	ES2512752-003	ES2512752-004	--------
					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	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L		<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	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L		<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	----
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	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L		<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	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	----
EP231P: PFAS Sums									
Sum of PFAS	----	0.01	µg/L		**0.09**	**0.65**	<0.01	**0.62**	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		**0.09**	**0.65**	<0.01	**0.62**	----
Sum of PFAS (WA DER List)	----	0.01	µg/L		**0.09**	**0.65**	<0.01	**0.62**	----
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**95.7**	**99.7**	**96.5**	**96.4**	----
13C8-PFOA	----	0.02	%		**98.8**	**101**	**97.1**	**98.7**	----

Surrogate Control Limits

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	: **ES2512752**	Page	: 1 of 4
Client	: **GHD PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: MS HELEN MILNE	Telephone	: +61-2-8784 8555
Project	: 12626622	Date Samples Received	: 29-Apr-2025
Site	: ----	Issue Date	: 06-May-2025
Sampler	: Jarrad Mawbey	No. of samples received	: 4
Order number	: 12626622	No. of samples analysed	: 4

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.**
- **NO Matrix Spike outliers occur.**
- **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.**

Analysis Holding Time Compliance

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

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

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

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

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231A: Perfluoroalkyl Sulfonic Acids							
HDPE (no PTFE) (EP231X)							
0020_MW069_250424, 0020_MW070_250424, 0020_MW071_250424, 0020_QC120_250424	**24-Apr-2025**	**05-May-2025**	21-Oct-2025	✓	**06-May-2025**	21-Oct-2025	✓
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE (no PTFE) (EP231X)							
0020_MW069_250424, 0020_MW070_250424, 0020_MW071_250424, 0020_QC120_250424	**24-Apr-2025**	**05-May-2025**	21-Oct-2025	✓	**06-May-2025**	21-Oct-2025	✓
EP231C: Perfluoroalkyl Sulfonamides							
HDPE (no PTFE) (EP231X)							
0020_MW069_250424, 0020_MW070_250424, 0020_MW071_250424, 0020_QC120_250424	**24-Apr-2025**	**05-May-2025**	21-Oct-2025	✓	**06-May-2025**	21-Oct-2025	✓
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE (no PTFE) (EP231X)							
0020_MW069_250424, 0020_MW070_250424, 0020_MW071_250424, 0020_QC120_250424	**24-Apr-2025**	**05-May-2025**	21-Oct-2025	✓	**06-May-2025**	21-Oct-2025	✓
EP231P: PFAS Sums							
HDPE (no PTFE) (EP231X)							
0020_MW069_250424, 0020_MW070_250424, 0020_MW071_250424, 0020_QC120_250424	**24-Apr-2025**	**05-May-2025**	21-Oct-2025	✓	**06-May-2025**	21-Oct-2025	✓

Quality Control Parameter Frequency Compliance

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

Matrix: **WATER**

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

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	4	**25.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	4	**25.00**	**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
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	WATER	In-house: Analysis of fresh and saline waters by solid phase extraction (SPE) followed by negative mode LC-ESI-MS/MS using MRM and isotope dilution or internal standard quantitation. Isotope dilution standards (where commercially available) and surrogates are added to the sample container. The entire contents are transferred to a weak anion exchange (WAX) solid phase extraction (SPE) cartridge. The sample container is successively rinsed with aliquots of the elution solvent. The eluted extract is combined with an equal volume of reagent water and a portion is filtered for analysis. Data quality objectives for internal standard recoveries are based on US EPA method 1633.

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

QUALITY CONTROL REPORT

Work Order	: **ES2512752**	Page	: 1 of 6
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	: 12626622	Date Samples Received	: 29-Apr-2025
Order number	: 12626622	Date Analysis Commenced	: 05-May-2025
C-O-C number	: ----	Issue Date	: 06-May-2025
Sampler	: Jarrad Mawbey		
Site	: ----		
Quote number	: ES23GHDSER0026		
No. of samples received	: 4		
No. of samples analysed	: 4		

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*
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: **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: 6552283)									
ES2512752-001	0020_MW069_250424	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	0.03	0.03	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	0.06	0.07	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: 6552283)									
ES2512752-001	0020_MW069_250424	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: 6552283)									
ES2512752-001	0020_MW069_250424	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

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: 6552283) - continued									
ES2512752-001	0020_MW069_250424	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: 6552283)									
ES2512752-001	0020_MW069_250424	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: 6552283)									
ES2512752-001	0020_MW069_250424	EP231X: Sum of PFAS	----	0.01	µg/L	0.09	0.10	10.5	0% - 50%

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

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

Sub-Matrix: **WATER**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6552283)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.25 µg/L	85.1	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.25 µg/L	97.0	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.25 µg/L	95.9	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	105	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.25 µg/L	91.5	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.25 µg/L	96.8	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6552283)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	87.9	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	94.2	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	88.7	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	77.4	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	92.9	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	99.6	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	91.6	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	98.7	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	94.6	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	83.1	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	97.4	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6552283)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	100.0	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	105	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	105	62.6	147
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	97.6	66.0	145
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	100	57.6	145
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	97.2	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	99.6	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6552283)								

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6552283) - continued								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.25 µg/L	91.3	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.25 µg/L	102	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.25 µg/L	105	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	82.3	71.4	144

Matrix Spike (MS) Report

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

Sub-Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 6552283)							
ES2512752-003	0020_MW071_250424	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.25 µg/L	84.3	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	95.8	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.25 µg/L	103	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.25 µg/L	88.2	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.25 µg/L	87.4	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 6552283)							
ES2512752-003	0020_MW071_250424	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	93.6	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	88.5	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	90.9	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	76.2	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	100	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	91.2	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	91.5	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	94.3	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	80.0	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	109	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 6552283)							
ES2512752-003	0020_MW071_250424	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	99.4	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	107	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	95.2	66.0	145

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: 6552283) - continued							
ES2512752-003	0020_MW071_250424	EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	106	57.6	145
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	97.1	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	85.0	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 6552283)							
ES2512752-003	0020_MW071_250424	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.25 µg/L	89.2	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.25 µg/L	106	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.25 µg/L	98.3	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.25 µg/L	84.8	71.4	144

CHAIN OF CUSTODY

ALS Laboratory please tick →

CLIENT: GHD Pty Ltd	TURNAROUND REQUIREMENT ☐ Standard TAT (List due date):	STANDARD 5 DAYS	FOR LABORATORY USE ONLY (Circle)
OFFICE: Sydney	(Standard TAT may be longer for some tests e.g. Ultra Trace Organics) ☐ Non Standard or urgent TAT (List due date):		Custody Seal Intact? Yes / No / N/A
PROJECT: ACT 0020 PFASOMP_25	ALS QUOTE NO.: ES23GHDSER0026	COC SEQUENCE NUMBER (Circle)	Free ice / frozen ice bricks present upon receipt? Yes / No / N/A
ORDER NUMBER: 12626622		COC: 1 2 3 4 5 6 7	Random Sample Temperature on Receipt: °C
PROJECT MANAGER: Helen Milne / Adam Schipp	CONTACT PH: +61 410533325	OP: 1 2 3 4 5 6 7	Other comment:

SAMPLER: Jarrad Mawbey	SAMPLER MOBILE: 0411 379 023	RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY: KM
COC emailed to ALS? (YES / NO)	EDD FORMAT (or default):	Andrew Gould			
Email Reports to: jarrad.mawbey@ghd.com ; helen.milne@ghd.com ; ghdlabreports@ghd.com		DATE/TIME:	DATE/TIME: 4/4/25	DATE/TIME:	DATE/TIME: 4/4/25 1:18pm 3.8°C chilled

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

ALS USE | SAMPLE DETAILS MATRIX: SOLID (S) WATER (W) | CONTAINER INFORMATION | ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).

LAB ID	SAMPLE ID	Date and Time	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL CONTAINERS	EP231X (PFAS Full Suite)	HOLD	
1	0020_MW001_250407	07 Apr 2025 08:33	W	Ice	2	X		
2	0020_MW007_250407	07 Apr 2025 08:54	W	Ice	4	X		EXTRA SAMPLE FOR LAB QC
3	0020_MW012_250408	08 Apr 2025 08:00	W	Ice	2	X		
4	0020_MW017_250331	31 Mar 2025 09:39	W	Ice	4	X		EXTRA SAMPLE FOR LAB QC
5	0020_MW037_250331	31 Mar 2025 11:48	W	Ice	2	X		
6	0020_MW052_250331	31 Mar 2025 13:41	W	Ice	2	X		
7	0020_MW057_250331	31 Mar 2025 15:30	W	Ice	4	X		EXTRA SAMPLE FOR LAB QC
8	0020_MW058_250403	03 Apr 2025 08:26	W	Ice	4	X		EXTRA SAMPLE FOR LAB QC
9	0020_MW059_250331	31 Mar 2025 16:29	W	Ice	2	X		
10	0020_MW068_250401	01 Apr 2025 10:14	W	Ice	2	X		
11	0020_MW102D_250331	31 Mar 2025 15:33	W	Ice	4	X		EXTRA SAMPLE FOR LAB QC
12	0020_MW102S_250331	31 Mar 2025 15:24	W	Ice	4	X		EXTRA SAMPLE FOR LAB QC
13	0020_MW104_250403	03 Apr 2025 09:49	W	Ice	4	X		EXTRA SAMPLE FOR LAB QC
14	0020_MW109_250331	31 Mar 2025 08:38	W	Ice	4	X		EXTRA SAMPLE FOR LAB QC
15	0020_MW110_250331	31 Mar 2025 01:43	W	Ice	2	X		
16	0020_MW111_250403	03 Apr 2025 08:45	W	Ice	4	X		EXTRA SAMPLE FOR LAB QC
17	0020_MW112_250331	31 Mar 2025 09:51	W	Ice	4	X		EXTRA SAMPLE FOR LAB QC
18	0020_MW115_250331	31 Mar 2025 11:04	W	Ice	2	X		
19	0020_QC100_250331	31 Mar 2025 09:45	W	Ice	2	X		
20	0020_QC101_250331	31 Mar 2025 12:00	S	Ice	4	X		
21	0020_QC130_250331	31 Mar 2025 09:51	W	Ice	2	X		
22	0020_QC131_250331	31 Mar 2025 11:48	W	Ice	2	X		
23	0020_QC132_250331	31 Mar 2025 13:15	S	Ice	2	X		
24	0020_QC133_250331	31 Mar 2025 13:15	W	Ice	2	X		
25	0020_QC137_250403	03 Apr 2025 08:26	W	Ice	2	X		
26	0020_QC138_250403	03 Apr 2025 09:49	W	Ice	2	X		
27	0020_QC150_250331	31 Mar 2025 12:04	W	Ice	2	X		
28	0020_QC151_250331	31 Mar 2025 10:55	S	Ice	2	X		
29	0020_QC152_250331	31 Mar 2025 16:06	W	Ice	2	X		
FWD	0020_QC200_250331	31 Mar 2025 09:45	W	Ice	2			PLEASE FORWARD TO EUROFINS USING ATTACHED COC
FWD	0020_QC201_250331	31 Mar 2025 12:00	S	Ice	2			PLEASE FORWARD TO EUROFINS USING ATTACHED COC
FWD	0020_QC230_250331	31 Mar 2025 09:51	W	Ice	2			PLEASE FORWARD TO EUROFINS USING ATTACHED COC
FWD	0020_QC231_250331	31 Mar 2025 11:48	W	Ice	2			PLEASE FORWARD TO EUROFINS USING ATTACHED COC
FWD	0020_QC232_250331	31 Mar 2025 13:15	S	Ice	2			PLEASE FORWARD TO EUROFINS USING ATTACHED COC
FWD	0020_QC233_250331	31 Mar 2025 13:15	W	Ice	2			PLEASE FORWARD TO EUROFINS USING ATTACHED COC
FWD	0020_QC237_250403	03 Apr 2025 08:26	W	Ice	2			PLEASE FORWARD TO EUROFINS USING ATTACHED COC
FWD	0020_QC238_250403	03 Apr 2025 09:49	W	Ice	2			PLEASE FORWARD TO EUROFINS USING ATTACHED COC
FWD	0020_QC250_250401	01 Apr 2025 08:31	W	Ice	2			PLEASE FORWARD TO EUROFINS USING ATTACHED COC
FWD	0020_QC251_250401	01 Apr 2025 08:47	W	Ice	2			PLEASE FORWARD TO EUROFINS USING ATTACHED COC
FWD	0020_QC252_250401	01 Apr 2025 08:31	S	Ice	2			PLEASE FORWARD TO EUROFINS USING ATTACHED COC
FWD	0020_QC253_250401	01 Apr 2025 08:47	S	Ice	2			PLEASE FORWARD TO EUROFINS USING ATTACHED COC
30	0020_SD001_250401	01 Apr 2025 08:47	S	Ice	1	X		
31	0020_SD002_250401	01 Apr 2025 08:31	S	Ice	1	X		
32	0020_SD004_250331	31 Mar 2025 10:55	S	Ice	1	X		
33	0020_SD006_250331	31 Mar 2025 16:06	S	Ice	1	X		
34	0020_SD007_250401	01 Apr 2025 09:05	S	Ice	1	X		
35	0020_SD018_250331	31 Mar 2025 11:30	S	Ice	1	X		
36	0020_SD019_250331	31 Mar 2025 11:00	S	Ice	1	X		
37	0020_SD024_250331	31 Mar 2025 09:00	S	Ice	1	X		
38	0020_SD025_250402	02 Apr 2025 14:08	S	Ice	1	X		
39	0020_SD026_250331	31 Mar 2025 12:00	S	Ice	1	X		
40	0020_SD028_250331	31 Mar 2025 12:04	S	Ice	1	X		
41	0020_SD032_250331	31 Mar 2025 13:15	S	Ice	1	X		

Subcontract Lab / Split WO: Forward Lab / Split WO

Lab / Analysis: Eurofins - QC200 QC201

Organised By / Date: QC250, QC231, QC252

Relinquished By / Date: QC233, QC237, QC238

Remote / Courier: QC250, QC251, QC252

WO No: QC253

Attached Files: Email Chain

Environmental Division
Sydney
Work Order Reference
ES2510618

Telephone : +61-2-8784 8555

CHAIN OF CUSTODY

CLIENT: GHD Pty Ltd	TURNAROUND REQUIREMENT ☐ Standard TAT (List due date): STANDARD		FOR LABORATORY USE ONLY (Circle)
OFFICE: Sydney	(Standard TAT may be longer for some tests e.g. Ultra Trace Organics) ☐ Non Standard or urgent TAT (List due date):		Custody Seal Intact? Yes No N/A
PROJECT: ACT 0029 PFASOMP 25	ALS QUOTE NO.: ES23GHDSER0026	COC SEQUENCE NUMBER (Circle)	Free ice / frozen ice bricks present upon receipt? Yes No N/A
ORDER NUMBER: 12520622		COC: 1 2 3 4 5 6 7	Random Sample Temperature on Receipt: °C
PROJECT MANAGER: Helen Milne / Adam Schrap	CONTACT PH: +61 41053 3325	OF: 1 2 3 4 5 6 7	Other comment:

SAMPLER: Jarrad Mawbey	SAMPLER MOBILE: 0411 379 023	RELINQUISHED BY: Andrew Duval	RECEIVED BY:
COC emailed to ALS? (YES / NO)	EDD FORMAT (or default):	DATE/TIME:	DATE/TIME:
Email Reports to: jarrad.mawbey@ghd.com helen.milne@ghd.com ghdlabreports@ghd.com			

RELINQUISHED BY:	RECEIVED BY:
DATE/TIME:	DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

ALS USE	SAMPLE DETAILS MATRIX: SOLID (S) WATER (W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required)						
LAB ID	SAMPLE ID	Date and Time	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL CONTAINERS	EP231X (PFAS Full Suite)			HOLD			
45	0020_SW010_250331	31 Mar 2025 09:00	W	Ice	2	X						
46	0020_SW011_250402	02 Apr 2025 14:08	W	Ice	2	X						
47	0020_SW012_250331	31 Mar 2025 12:00	W	Ice	2	X						
48	0020_SW016_250331	31 Mar 2025 11:52	W	Ice	2	X						
49	0020_SW018_250331	31 Mar 2025 12:04	W	Ice	2	X						EXTRA SAMPLE FOR LAB QC
50	0020_SW022_250331	31 Mar 2025 13:15	W	Ice	2	X						EXTRA SAMPLE FOR LAB QC
51	0020_SW023_250331	31 Mar 2025 13:26	W	Ice	2	X						
52	0020_SW026_250401	01 Apr 2025 08:47	W	Ice	2	X						
53	0020_SW027_250401	01 Apr 2025 08:31	W	Ice	2	X						
54	0020_SW029_250331	31 Mar 2025 10:55	W	Ice	2	X						
55	0020_SW030_250331	31 Mar 2025 16:24	W	Ice	2	X						
56	0020_SW032_250331	31 Mar 2025 16:06	W	Ice	2	X						
57	0020_SW033_250401	01 Apr 2025 09:05	W	Ice	2	X						
58	0020_SW035_250331	31 Mar 2025 10:20	W	Ice	2	X						
59	0020_SW036_250331	31 Mar 2025 10:00	W	Ice	2	X						
60	0020_SW037_250331	31 Mar 2025 09:45	W	Ice	2	X						
61	0020_SW057_250331	31 Mar 2025 09:45	W	Ice	2	X						EXTRA SAMPLE FOR LAB QC
62	0020_QC330_250331	31/03/2025	W	Ice	2	X						
63	0020_QC350_2503331	31/03/2025	W	Ice	2	X						
64	0020_QC380_250401	1/04/2025	W	Ice	2	X						
65	0020_QC500_250331	31/03/2024	W	Ice	2	X						
66	0020_QC501_250401	1/04/2025	W	Ice	2				X			
67	0020_QC504_250331	31/03/2025	S	Ice	1	X						

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☑ Sydney
Unit F3 - 6 Building F, 16 Mars Road, Lane Cove
Phone: +612 9900 8400
Email: enviro.syd@mgtlabmark.com.au

☐ Brisbane
Unit 1-21 Smallwood Place, Murrarie
Phone: +617 3902 4600
Email: enviro.bris@mgtlabmark.com.au

☐ Melbourne
2 Kingston Town Close, Oakleigh, VIC 3166
Phone: +613 8564 5000 Fax: +613 8564 5090
Email: enquiries.melb@mgtlabmark.com.au

CHAIN OF CUSTODY RECORD

CLIENT DETAILS

Company Name : GHD Pty Ltd	Contact Name : Jarrad Mawbey 0411 379 023	Purchase Order :	COC Number :
Office Address :	Project Manager : Helen Miley / Adam Shipp	PROJECT Number : 12626622	Eurofins | mgt quote ID :
Level 15, 133 Castlereagh Street, Sydney NSW 2000	Email for results : jarrad.mawbey@ghd.com; helen.miley@ghd.com; ghdlabreports@ghd.com	PROJECT Name : ACT_0020_PFASOMP_25	Data output format: ESDAT

Special Directions & Comments :

Forwarded from ALS

Eurofins | mgt DI water batch number:

Analytes

	Sample ID	Date	Matrix	PFAS Extended Suite - 30 PFAS	PFAS Extended Suite - 30 PFAS - Super Trace				HOLD						
1	0020_QC200_250331	31 Mar 2025 09:45	W	X											
2	0020_QC201_250331	31 Mar 2025 12:00	S	X											
3	0020_QC230_250331	31 Mar 2025 09:51	W	X											
4	0020_QC231_250331	31 Mar 2025 11:48	W	X											
5	0020_QC232_250331	31 Mar 2025 13:15	S	X											
6	0020_QC233_250331	31 Mar 2025 13:15	W	X											
7	0020_QC237_250403	03 Apr 2025 08:26	W	X											
8	0020_QC238_250403	03 Apr 2025 09:49	W	X											
9	0020_QC250_250401	01 Apr 2025 08:31	W	X											
10	0020_QC251_250401	01 Apr 2025 08:47	W	X											
11	0020_QC252_250401	01 Apr 2025 08:31	S	X											
12	0020_QC253_250401	01 Apr 2025 08:47	S	X											

Some common holding times (with correct preservation).
For further information contact the lab

Waters		Soils
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, CrS
Ferrous iron	7 days	ASLP, TCLP

Containers:								Sample comr
500P	250P	60P	1LA	40mL vial	250mL A	Jar	Bag	
								2x Contair
								1x Contai
								2x Contair
								1x Contai
								2x Contair
								2x Contair
								2x Contair
								2x Contair
								2x Contair
								2x Contair
								1x Contai
								1x Contai

Relinquished By: Andrew Duval (GHD)

Date & Time : 8/4/2025

Signature: A.Duval

Turn around time

1 DAY ☐ 2 DAY ☐ 3 DAY ☐

5 DAY ☐ 10 DAY ☐ Other:

Method Of Shipment

☐ Courier
☐ Hand Delivered
☐ Postal
Courier Consignment # :

Temperature on a

Report number:

1209

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

Eurofins Environment Testing Australia Pty Ltd

ABN: 50 005 085 521

Melbourne	Geelong	Sydney	Canberra	Brisbane	Newcastle
6 Monterey Road	19/8 Lewalan Street	179 Magowar Road	Unit 1,2 Dacre Street	1/21 Smallwood Place	1/2 Frost Drive
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+61 3 8564 5000	+61 3 8564 5000	+61 2 9900 8400	+61 2 6113 8091	+61 7 3902 4600	+61 2 4968 8448
NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261
Site# 1254	Site# 25403	Site# 18217	Site# 25466	Site# 20794 & 2780	Site# 25079

Eurofins ARL Pty Ltd

ABN: 91 05 0159 898

Perth
46-48 Banksia Road
Welshpool
WA 6106
+61 8 6253 4444
NATA# 2377
Site# 2370 & 2554

Eurofins Environment Testing NZ Ltd

NZBN: 9429046024954

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

Sample Receipt Advice

Company name:	GHD Pty Ltd NSW
Contact name:	Jarrad Mawbey
Project name:	ACT_0020_PFASOMP_25
Project ID:	12626622
Turnaround time:	5 Day
Date/Time received	Apr 14, 2025 1:18 PM
Eurofins reference	1209674

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 : 3.8 degrees Celsius.
✓	All samples have been received as described on the above COC.
✓	COC has been completed correctly.
✓	Attempt to chill was evident.
✓	Appropriately preserved sample containers have been used.
✓	All samples were received in good condition.
✓	Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
✓	Appropriate sample containers have been used.
✓	Sample containers for volatile analysis received with zero headspace.
X	Split sample sent to requested external lab.
X	Some samples have been subcontracted.
N/A	Custody Seals intact (if used).

Notes

Contact

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

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

Results will be delivered electronically via email to Jarrad Mawbey - Jarrad.Mawbey@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: **Jarrad Mawbey**

Report **1209674-S-V2**
Project name ACT_0020_PFASOMP_25
Project ID 12626622
Received Date Apr 14, 2025

Client Sample ID			**0020_QC201_250331**	**0020_QC232_250331**	**0020_QC252_250401**	**0020_QC253_250401**
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S25-Ap0041482**	**S25-Ap0041485**	**S25-Ap0041491**	**S25-Ap0041492**
Date Sampled			**Mar 31, 2025**	**Mar 31, 2025**	**Apr 01, 2025**	**Apr 01, 2025**
Test/Reference	LOR	Unit				
Sample Properties						
% Moisture	1	%	21	39	37	21
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanoic acid (PFPeA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanoic acid (PFHxA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanoic acid (PFHpA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanoic acid (PFOA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanoic acid (PFNA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanoic acid (PFDA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroundecanoic acid (PFUnDA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorododecanoic acid (PFDoDA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotridecanoic acid (PFTrDA)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotetradecanoic acid (PFTeDA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
13C4-PFBA (surr.)	1	%	75	80	65	77
13C5-PFPeA (surr.)	1	%	123	108	115	109
13C5-PFHxA (surr.)	1	%	111	127	115	134
13C4-PFHpA (surr.)	1	%	99	110	95	115
13C8-PFOA (surr.)	1	%	83	89	93	95
13C5-PFNA (surr.)	1	%	84	101	104	103
13C6-PFDA (surr.)	1	%	86	101	95	97
13C2-PFUnDA (surr.)	1	%	114	138	105	119
13C2-PFDoDA (surr.)	1	%	96	122	108	128
13C2-PFTeDA (surr.)	1	%	104	127	99	107
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	10	ug/kg	< 10	< 10	< 10	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	10	ug/kg	< 10	< 10	< 10	< 10

Client Sample ID			0020_QC201_250331	0020_QC232_250331	0020_QC252_250401	0020_QC253_250401
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S25-Ap0041482	S25-Ap0041485	S25-Ap0041491	S25-Ap0041492
Date Sampled			Mar 31, 2025	Mar 31, 2025	Apr 01, 2025	Apr 01, 2025
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonamido substances						
13C8-FOSA (surr.)	1	%	123	111	117	130
D3-N-MeFOSA (surr.)	1	%	156	151	129	150
D5-N-EtFOSA (surr.)	1	%	113	112	128	136
D7-N-MeFOSE (surr.)	1	%	123	88	133	108
D9-N-EtFOSE (surr.)	1	%	109	96	104	103
D5-N-EtFOSAA (surr.)	1	%	124	124	97	123
D3-N-MeFOSAA (surr.)	1	%	121	160	102	98
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanesulfonic acid (PFNS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropropanesulfonic acid (PFPrS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanesulfonic acid (PFPeS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanesulfonic acid (PFHxS)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanesulfonic acid (PFHpS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanesulfonic acid (PFOS)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanesulfonic acid (PFDS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
13C3-PFBS (surr.)	1	%	116	121	130	115
18O2-PFHxS (surr.)	1	%	102	123	114	98
13C8-PFOS (surr.)	1	%	136	142	113	123
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)[N11]	10	ug/kg	< 10	< 10	< 10	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
13C2-4:2 FTSA (surr.)	1	%	54	66	74	68
13C2-6:2 FTSA (surr.)	1	%	77	78	40	65
13C2-8:2 FTSA (surr.)	1	%	70	195	30	99
13C2-10:2 FTSA (surr.)	1	%	117	147	138	127
PFASs Summations						
Sum (PFHxS + PFOS)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of WA DWER PFAS (n=10)*	10	ug/kg	< 10	< 10	< 10	< 10
Sum of PFASs (n=30)*	50	ug/kg	< 50	< 50	< 50	< 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	Sydney	Apr 16, 2025	14 Days
- Method: LTM-GEN-7080 Moisture			
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs)	Sydney	Apr 16, 2025	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Sydney	Apr 16, 2025	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Sydney	Apr 16, 2025	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Sydney	Apr 16, 2025	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

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

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

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

Eurofins ARL Pty Ltd
ABN: 91 05 0159 898

Perth
46-48 Banksia Road
Welshpool
WA 6106
+61 8 6253 4444
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IANZ# 1327	IANZ# 1308	IANZ# 1290	IANZ# 1402

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

Project Name: ACT_0020_PFASOMP_25
Project ID: 12626622

Order No.:
Report #: 1209674
Phone: 02 9239 7100
Fax: 02 9239 7199

Received: Apr 14, 2025 1:18 PM
Due: Apr 23, 2025
Priority: 5 Day
Contact Name: Jarrad Mawbey

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_250331	Mar 31, 2025		Water	S25-Ap0041481		X
2	0020_QC201_250331	Mar 31, 2025		Soil	S25-Ap0041482	X	X
3	0020_QC230_250331	Mar 31, 2025		Water	S25-Ap0041483		X
4	0020_QC231_250331	Mar 31, 2025		Water	S25-Ap0041484		X
5	0020_QC232_250331	Mar 31, 2025		Soil	S25-Ap0041485	X	X
6	0020_QC233_250331	Mar 31, 2025		Water	S25-Ap0041486		X
7	0020_QC237_250403	Apr 03, 2025		Water	S25-Ap0041487		X
8	0020_QC238_250403	Apr 03, 2025		Water	S25-Ap0041488		X
9	0020_QC250_	Apr 01, 2025		Water	S25-Ap0041489		X

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

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

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NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261
Site# 1254	Site# 25403	Site# 18217	Site# 25466	Site# 20794 & 2780	Site# 25079

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ABN: 91 05 0159 898

Perth
46-48 Banksia Road
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IANZ# 1327	IANZ# 1308	IANZ# 1290	IANZ# 1402

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

Project Name: ACT_0020_PFASOMP_25
Project ID: 12626622

Order No.:
Report #: 1209674
Phone: 02 9239 7100
Fax: 02 9239 7199

Received: Apr 14, 2025 1:18 PM
Due: Apr 23, 2025
Priority: 5 Day
Contact Name: Jarrad Mawbey

Eurofins Analytical Services Manager : Adam Bateup

Sample Detail						Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)
Sydney Laboratory - NATA # 1261 Site # 18217						X	X
	250401						
10	0020_QC251_250401	Apr 01, 2025		Water	S25-Ap0041490		X
11	0020_QC252_250401	Apr 01, 2025		Soil	S25-Ap0041491	X	X
12	0020_QC253_250401	Apr 01, 2025		Soil	S25-Ap0041492	X	X
Test Counts						4	12

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Internal Quality Control Review and Glossary

General

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

Holding Times

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

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours before sample receipt deadlines as stated on the SRA.

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

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

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

Units

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

Terms

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

QC - Acceptance Criteria

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

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

Results <10 times the LOR:	No Limit
Results between 10-20 times the LOR:	RPD must lie between 0-50%
Results >20 times the LOR:	RPD must lie between 0-30%

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

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

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

QC Data General Comments

1. Where a result is reported as less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown are not data from your samples.
3. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time.Analysis will begin as soon as possible after sample receipt.
4. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery, the term "INT" appears against that analyte.
5. For Matrix Spikes and LCS results, a dash "-" in the report means that the specific analyte was not added to the QC sample.
6. Duplicate RPDs are calculated from raw analytical data; thus, it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	ug/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 (PFTrDA)	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 (PFSAs)							
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 FTSAs)							
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)	%	103			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	89			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	92			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	90			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	69			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	99			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	92			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	82			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	95			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	102			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	98			50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	%	75			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	59			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	76			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	%	115			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	%	81			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	84			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	74			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	94			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	%	87			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	%	81			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	72			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	99			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	%	71			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	82			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	58			50-150	Pass	
LCS - % Recovery							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	98			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	%	78			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	87			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	107			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-Ap0038603	NCP	%	102			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	S25-Ap0038603	NCP	%	92			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	S25-Ap0038603	NCP	%	78			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	S25-Ap0038603	NCP	%	89			50-150	Pass	
Perfluorooctanoic acid (PFOA)	S25-Ap0038603	NCP	%	74			50-150	Pass	
Perfluorononanoic acid (PFNA)	S25-Ap0038603	NCP	%	107			50-150	Pass	
Perfluorodecanoic acid (PFDA)	S25-Ap0038603	NCP	%	87			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	S25-Ap0038603	NCP	%	92			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	S25-Ap0038603	NCP	%	85			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	S25-Ap0038603	NCP	%	103			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	S25-Ap0038603	NCP	%	106			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonamido substances				Result 1					
Perfluorooctane sulfonamide (FOSA)	S25-Ap0038603	NCP	%	81			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	S25-Ap0038603	NCP	%	75			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	S25-Ap0038603	NCP	%	74			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	S25-Ap0038603	NCP	%	74			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	S25-Ap0038603	NCP	%	92			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-Ap0038603	NCP	%	94			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	S25-Ap0038603	NCP	%	86			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1					
Perfluorobutanesulfonic acid (PFBS)	S25-Ap0038603	NCP	%	90			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	S25-Ap0038603	NCP	%	71			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	S25-Ap0038603	NCP	%	68			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	S25-Ap0038603	NCP	%	75			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	S25-Ap0038603	NCP	%	106			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	S25-Ap0038603	NCP	%	67			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	S25-Ap0038603	NCP	%	91			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	S25-Ap0038603	NCP	%	67			50-150	Pass	
Spike - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	S25-Ap0044109	NCP	%	131			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	S25-Ap0038603	NCP	%	82			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	S25-Ap0038603	NCP	%	64			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	S25-Ap0038603	NCP	%	128			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	W25-Ap0041410	NCP	%	12	11	3.0	30%	Pass	
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	S25-Ap0041485	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	S25-Ap0041485	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	S25-Ap0041485	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	S25-Ap0041485	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	S25-Ap0041485	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	S25-Ap0041485	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	S25-Ap0041485	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	S25-Ap0041485	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	S25-Ap0041485	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	S25-Ap0041485	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	S25-Ap0041485	CP	ug/kg	< 5	< 5	<1	30%	Pass	

Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	S25-Ap0041485	CP	ug/kg	< 5	< 5	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	S25-Ap0041485	CP	ug/kg	< 5	< 5	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	S25-Ap0041485	CP	ug/kg	< 5	< 5	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	S25-Ap0041485	CP	ug/kg	< 5	< 5	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	S25-Ap0041485	CP	ug/kg	< 5	< 5	<1	30%	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	S25-Ap0041485	CP	ug/kg	< 10	< 10	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	S25-Ap0041485	CP	ug/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	S25-Ap0041485	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)	S25-Ap0041485	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)	S25-Ap0041485	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	S25-Ap0041485	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	S25-Ap0041485	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	S25-Ap0041485	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	S25-Ap0041485	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	S25-Ap0041485	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Duplicate									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1	Result 2	RPD			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	S25-Ap0041485	CP	ug/kg	< 5	< 5	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	S25-Ap0041485	CP	ug/kg	< 10	< 10	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	S25-Ap0041485	CP	ug/kg	< 5	< 5	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	S25-Ap0041485	CP	ug/kg	< 5	< 5	<1	30%	Pass	

Comments

Report 1209674-S-V2 (amendment to report 1209674-S) has been issued with corrected sample ID from 0020_QC250_250403 changed to 0020_QC250_250401 as per client email request.

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
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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Attention: **Jarrad Mawbey**

Report **1209674-W-V2**
Project name ACT_0020_PFASOMP_25
Project ID 12626622
Received Date Apr 14, 2025

Client Sample ID			**0020_QC200_250331**	**0020_QC230_250331**	**0020_QC231_250331**	**0020_QC233_250331**
Sample Matrix			**Water**	**Water**	**Water**	**Water**
Eurofins Sample No.			**S25-Ap0041481**	**S25-Ap0041483**	**S25-Ap0041484**	**S25-Ap0041486**
Date Sampled			**Mar 31, 2025**	**Mar 31, 2025**	**Mar 31, 2025**	**Mar 31, 2025**
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	< 0.05	0.47	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	0.06	1.3	0.02
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	0.11	1.9	0.03
Perfluoroheptanoic acid (PFHpA)[N11]	0.01	ug/L	< 0.01	0.03	0.30	< 0.01
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	0.06	0.50	< 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	%	122	114	120	121
13C5-PFPeA (surr.)	1	%	136	123	120	122
13C5-PFHxA (surr.)	1	%	133	117	124	129
13C4-PFHpA (surr.)	1	%	134	132	124	121
13C8-PFOA (surr.)	1	%	114	127	121	123
13C5-PFNA (surr.)	1	%	118	126	117	144
13C6-PFDA (surr.)	1	%	128	129	141	128
13C2-PFUnDA (surr.)	1	%	109	121	138	118
13C2-PFDoDA (surr.)	1	%	97	117	125	110
13C2-PFTeDA (surr.)	1	%	107	112	144	128
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	%	110	113	127	123
D3-N-MeFOSA (surr.)	1	%	118	110	105	91

Client Sample ID			0020_QC200_250331	0020_QC230_250331	0020_QC231_250331	0020_QC233_250331
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S25-Ap0041481	S25-Ap0041483	S25-Ap0041484	S25-Ap0041486
Date Sampled			Mar 31, 2025	Mar 31, 2025	Mar 31, 2025	Mar 31, 2025
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonamido substances						
D5-N-EtFOSA (surr.)	1	%	87	78	72	60
D7-N-MeFOSE (surr.)	1	%	98	92	101	94
D9-N-EtFOSE (surr.)	1	%	95	84	98	84
D5-N-EtFOSAA (surr.)	1	%	109	156	194	172
D3-N-MeFOSAA (surr.)	1	%	108	148	186	140
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS)[N11]	0.01	ug/L	< 0.01	0.05	0.94	0.02
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	0.35	< 0.01
Perfluoropentanesulfonic acid (PFPeS)[N15]	0.01	ug/L	< 0.01	0.04	0.77	< 0.01
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.01	ug/L	0.04	0.46	5.9	0.12
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.01	ug/L	< 0.01	< 0.01	0.39	< 0.01
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	0.11	0.08	2.2	0.21
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	130	142	107	130
18O2-PFHxS (surr.)	1	%	125	126	98	108
13C8-PFOS (surr.)	1	%	125	116	116	112
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.1	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)[N11]	0.05	ug/L	< 0.05	< 0.05	4.0	< 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	%	186	190	INT	190
13C2-6:2 FTSA (surr.)	1	%	144	166	143	155
13C2-8:2 FTSA (surr.)	1	%	100	110	158	134
13C2-10:2 FTSA (surr.)	1	%	100	161	199	161
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	0.15	0.54	8.1	0.33
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	0.11	0.14	2.7	0.21
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	0.15	0.6	8.6	0.33
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	0.15	0.85	17.51	0.4
Sum of PFASs (n=30)*	0.1	ug/L	0.15	0.9	19.02	0.4

Client Sample ID			0020_QC237_250403	0020_QC238_250403	0020_QC250_250401	0020_QC251_250401
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S25-Ap0041487	S25-Ap0041488	S25-Ap0041489	S25-Ap0041490
Date Sampled			Apr 03, 2025	Apr 03, 2025	Apr 01, 2025	Apr 01, 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	< 0.01
Perfluoroheptanoic acid (PFHpA)[N11]	0.01	ug/L	0.02	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	0.06	< 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	%	124	125	118	127
13C5-PFPeA (surr.)	1	%	109	123	139	122
13C5-PFHxA (surr.)	1	%	120	171	91	139
13C4-PFHpA (surr.)	1	%	124	126	131	116
13C8-PFOA (surr.)	1	%	120	126	134	137
13C5-PFNA (surr.)	1	%	120	139	139	120
13C6-PFDA (surr.)	1	%	128	150	114	136
13C2-PFUnDA (surr.)	1	%	146	142	111	122
13C2-PFDoDA (surr.)	1	%	166	121	98	134
13C2-PFTeDA (surr.)	1	%	189	93	151	144
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	%	123	128	102	129
D3-N-MeFOSA (surr.)	1	%	144	121	104	127
D5-N-EtFOSA (surr.)	1	%	108	89	75	83
D7-N-MeFOSE (surr.)	1	%	128	103	96	112
D9-N-EtFOSE (surr.)	1	%	132	104	88	96
D5-N-EtFOSAA (surr.)	1	%	INT	188	99	INT
D3-N-MeFOSAA (surr.)	1	%	193	165	104	165
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS)[N11]	0.01	ug/L	0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS)[N15]	0.01	ug/L	0.02	< 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	0.02	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.01	ug/L	0.51	< 0.01	0.05	< 0.01
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.01	ug/L	0.03	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	2.7	< 0.01	0.06	< 0.01
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01

Client Sample ID			0020_QC237_250403	0020_QC238_250403	0020_QC250_250401	0020_QC251_250401
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S25-Ap0041487	S25-Ap0041488	S25-Ap0041489	S25-Ap0041490
Date Sampled			Apr 03, 2025	Apr 03, 2025	Apr 01, 2025	Apr 01, 2025
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonic acids (PFSAs)						
13C3-PFBS (surr.)	1	%	115	122	108	129
18O2-PFHxS (surr.)	1	%	129	128	122	136
13C8-PFOS (surr.)	1	%	113	128	124	140
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 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	%	146	129	176	126
13C2-6:2 FTSA (surr.)	1	%	132	123	141	135
13C2-8:2 FTSA (surr.)	1	%	111	152	97	153
13C2-10:2 FTSA (surr.)	1	%	INT	INT	107	185
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	3.21	< 0.01	0.11	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	2.76	< 0.01	0.06	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	3.27	< 0.01	0.11	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	3.33	< 0.05	0.11	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	3.41	< 0.1	0.11	< 0.1

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	Apr 16, 2025	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Sydney	Apr 16, 2025	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Sydney	Apr 16, 2025	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Sydney	Apr 16, 2025	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

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

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

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

Eurofins ARL Pty Ltd
ABN: 91 05 0159 898

Perth
46-48 Banksia Road
Welshpool
WA 6106
+61 8 6253 4444
NATA# 2377
Site# 2370 & 2554

Eurofins Environment Testing NZ Ltd
NZBN: 9429046024954

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

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

Project Name: ACT_0020_PFASOMP_25
Project ID: 12626622

Order No.:
Report #: 1209674
Phone: 02 9239 7100
Fax: 02 9239 7199

Received: Apr 14, 2025 1:18 PM
Due: Apr 23, 2025
Priority: 5 Day
Contact Name: Jarrad Mawbey

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_250331	Mar 31, 2025		Water	S25-Ap0041481		X
2	0020_QC201_250331	Mar 31, 2025		Soil	S25-Ap0041482	X	X
3	0020_QC230_250331	Mar 31, 2025		Water	S25-Ap0041483		X
4	0020_QC231_250331	Mar 31, 2025		Water	S25-Ap0041484		X
5	0020_QC232_250331	Mar 31, 2025		Soil	S25-Ap0041485	X	X
6	0020_QC233_250331	Mar 31, 2025		Water	S25-Ap0041486		X
7	0020_QC237_250403	Apr 03, 2025		Water	S25-Ap0041487		X
8	0020_QC238_250403	Apr 03, 2025		Water	S25-Ap0041488		X
9	0020_QC250_	Apr 01, 2025		Water	S25-Ap0041489		X

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

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

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

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ABN: 91 05 0159 898

Perth
46-48 Banksia Road
Welshpool
WA 6106
+61 8 6253 4444
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NZBN: 9429046024954

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Auckland 1061	Auckland 1061	Christchurch 7675	Tauranga 3112
+64 9 526 4551	+64 9 525 0568	+64 3 343 5201	+64 9 525 0568
IANZ# 1327	IANZ# 1308	IANZ# 1290	IANZ# 1402

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

Project Name: ACT_0020_PFASOMP_25
Project ID: 12626622

Order No.:
Report #: 1209674
Phone: 02 9239 7100
Fax: 02 9239 7199

Received: Apr 14, 2025 1:18 PM
Due: Apr 23, 2025
Priority: 5 Day
Contact Name: Jarrad Mawbey

Eurofins Analytical Services Manager : Adam Bateup

Sample Detail						Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)
Sydney Laboratory - NATA # 1261 Site # 18217						X	X
	250401						
10	0020_QC251_250401	Apr 01, 2025		Water	S25-Ap0041490		X
11	0020_QC252_250401	Apr 01, 2025		Soil	S25-Ap0041491	X	X
12	0020_QC253_250401	Apr 01, 2025		Soil	S25-Ap0041492	X	X
Test Counts						4	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 (*bis*-tributyltin oxide) - individual tributyltin compounds cannot be identified separately in the environment; however, free tributyltin was measured, and its values were converted stoichiometrically into tributyltin oxide for comparison with regulatory limits.
TCLP	Toxicity Characteristic Leaching Procedure
TEQ	Toxic Equivalency Quotient or Total Equivalence
QSM	US Department of Defense Quality Systems Manual Version 6.0
US EPA	United States Environmental Protection Agency
WA DWER	Sum of PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

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

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

Results <10 times the LOR:	No Limit
Results between 10-20 times the LOR:	RPD must lie between 0-50%
Results >20 times the LOR:	RPD must lie between 0-30%

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

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

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

QC Data General Comments

1. Where a result is reported as less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown are not data from your samples.
3. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time.Analysis will begin as soon as possible after sample receipt.
4. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery, the term "INT" appears against that analyte.
5. For Matrix Spikes and LCS results, a dash "-" in the report means that the specific analyte was not added to the QC sample.
6. Duplicate RPDs are calculated from raw analytical data; thus, it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	ug/L	< 0.05			0.05	Pass	
Perfluoropentanoic acid (PFPeA)	ug/L	< 0.01			0.01	Pass	
Perfluorohexanoic acid (PFHxA)	ug/L	< 0.01			0.01	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/L	< 0.01			0.01	Pass	
Perfluorooctanoic acid (PFOA)	ug/L	< 0.01			0.01	Pass	
Perfluorononanoic acid (PFNA)	ug/L	< 0.01			0.01	Pass	
Perfluorodecanoic acid (PFDA)	ug/L	< 0.01			0.01	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/L	< 0.01			0.01	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/L	< 0.01			0.01	Pass	
Perfluorotridecanoic acid (PFTrDA)	ug/L	< 0.01			0.01	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/L	< 0.01			0.01	Pass	
Method Blank							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	ug/L	< 0.05			0.05	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/L	< 0.05			0.05	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/L	< 0.05			0.05	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	ug/L	< 0.05			0.05	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	ug/L	< 0.05			0.05	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/L	< 0.05			0.05	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/L	< 0.05			0.05	Pass	
Method Blank							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	ug/L	< 0.01			0.01	Pass	
Perfluorononanesulfonic acid (PFNS)	ug/L	< 0.01			0.01	Pass	
Perfluoropropanesulfonic acid (PFPrS)	ug/L	< 0.01			0.01	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/L	< 0.01			0.01	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/L	< 0.01			0.01	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/L	< 0.01			0.01	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/L	< 0.01			0.01	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/L	< 0.01			0.01	Pass	
Method Blank							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/L	< 0.01			0.01	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	ug/L	< 0.05			0.05	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/L	< 0.01			0.01	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/L	< 0.01			0.01	Pass	
LCS - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	%	88			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	111			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	108			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	132			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	105			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	88			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	91			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	104			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	107			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	96			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	92			50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	%	95			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	67			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	95			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	%	93			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	%	94			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	93			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	101			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	113			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	%	86			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	%	96			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	99			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	92			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	%	87			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	89			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	88			50-150	Pass	
LCS - % Recovery							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	128			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	%	97			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	111			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	103			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)	N25-Ap0036660	NCP	%	85			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	N25-Ap0036660	NCP	%	104			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	N25-Ap0036660	NCP	%	96			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	N25-Ap0036660	NCP	%	89			50-150	Pass	
Perfluorooctanoic acid (PFOA)	N25-Ap0036660	NCP	%	78			50-150	Pass	
Perfluorononanoic acid (PFNA)	N25-Ap0036660	NCP	%	105			50-150	Pass	
Perfluorodecanoic acid (PFDA)	N25-Ap0036660	NCP	%	104			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	N25-Ap0036660	NCP	%	108			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	N25-Ap0036660	NCP	%	103			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	N25-Ap0036660	NCP	%	78			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	N25-Ap0036660	NCP	%	91			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonamido substances				Result 1					
Perfluorooctane sulfonamide (FOSA)	N25-Ap0036660	NCP	%	80			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	N25-Ap0036660	NCP	%	70			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	N25-Ap0036660	NCP	%	103			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	N25-Ap0036660	NCP	%	94			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	N25-Ap0036660	NCP	%	92			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	N25-Ap0036660	NCP	%	93			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	N25-Ap0036660	NCP	%	115			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1					
Perfluorobutanesulfonic acid (PFBS)	N25-Ap0036660	NCP	%	107			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	N25-Ap0036660	NCP	%	82			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	N25-Ap0036660	NCP	%	64			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	N25-Ap0036660	NCP	%	71			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	N25-Ap0036660	NCP	%	94			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	N25-Ap0036660	NCP	%	87			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	N25-Ap0036660	NCP	%	87			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	N25-Ap0036660	NCP	%	85			50-150	Pass	
Spike - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	N25-Ap0036660	NCP	%	109			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	N25-Ap0036660	NCP	%	84			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	N25-Ap0036660	NCP	%	120			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	N25-Ap0036660	NCP	%	90			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-Ap0045163	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	S25-Ap0045163	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	S25-Ap0045163	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	S25-Ap0045163	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	S25-Ap0045163	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	S25-Ap0045163	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	S25-Ap0045163	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	S25-Ap0045163	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	S25-Ap0045163	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	S25-Ap0045163	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	S25-Ap0045163	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	

Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	S25-Ap0045163	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	S25-Ap0045163	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	S25-Ap0045163	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	S25-Ap0045163	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	S25-Ap0045163	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	S25-Ap0045163	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	S25-Ap0045163	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	S25-Ap0045163	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)	S25-Ap0045163	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)	S25-Ap0045163	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	S25-Ap0045163	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	S25-Ap0045163	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	S25-Ap0045163	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	S25-Ap0045163	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	S25-Ap0045163	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1	Result 2	RPD			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	S25-Ap0045163	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	S25-Ap0045163	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	S25-Ap0045163	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	S25-Ap0045163	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	

Comments

Report 1209674-W-V2 (amendment to report 1209674-W) has been issued with corrected sample ID from 0020_QC250_250403 changed to 0020_QC250_250401 as per client email request.

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
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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CHAIN OF CUSTODY

ALS Environmental — ALS Laboratory please tick →

CLIENT: GHD Pty Ltd	TURNAROUND REQUIREMENT ☐ Standard TAT (List due date):	STANDARD	FOR LABORATORY USE
OFFICE: Sydney	(Standard TAT may be longer for some tests e.g. Ultra Trace Organics) ☐ Non Standard or urgent TAT (List due date):		Custody Seal Intact?
PROJECT: ACT_0021_PFASOMP_25	ALS QUOTE NO.: ES23GHDSER0026	COC SEQUENCE NUMBER (Circle)	Free ice / frozen ice bricks present upon receipt?
ORDER NUMBER: 12626622		COC: 1 2 3 4 5 6 7	Random Sample Temperature on Receipt:
PROJECT MANAGER: Helen Milne / Adam Schipp	CONTACT PH: +61 410533325	OF: 1 2 3 4 5 6 7	Other comment:
SAMPLER: Jarrad Mawbey	SAMPLER MOBILE: 0411 379 023	RELINQUISHED BY: Andrew Duval	RECEIVED BY:
COC emailed to ALS? (YES / NO)	EDD FORMAT (or default):	DATE/TIME: 3/4/2025 @12pm	DATE/TIME: 4/4/25 11c
Email Reports to: jarrad.mawbey@ghd.com helen.milne@ghd.com		RELINQUISHED BY:	RECEIVED BY: Kaja Mohamud
COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:		DATE/TIME:	DATE/TIME: 1/4/25 1:18pm 0.3° CWT

ALS USE	SAMPLE DETAILS MATRIX: SOLID (S) WATER (W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required)						
LAB ID	SAMPLE ID	Date and Time	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL CONTAINERS	EP231X (PFAS Full Suite)	PFAS – Super Trace Waters Long Suite (EP231X-ST)			HOLD		
1	0021_MW018_250402	02 Apr 2025 13:08	W	Ice	2	X						
2	0021_MW020_250402	02 Apr 2025 08:34	W	Ice	4	X						
3	0021_MW021_250401	01 Apr 2025 16:23	W	Ice	4	X						EXTRA SAMPLE FOR LAB QC
4	0021_MW022_250401	01 Apr 2025 13:01	W	Ice	2	X						EXTRA SAMPLE FOR LAB QC
5	0021_MW024_250401	01 Apr 2025 12:12	W	Ice	4	X						
6	0021_MW025_250402	02 Apr 2025 11:03	W	Ice	2	X						EXTRA SAMPLE FOR LAB QC
7	0021_MW026_250407	07 Apr 2025 10:25	W	Ice	2	X						
8	0021_MW028_250402	02 Apr 2025 14:12	W	Ice	2	X						
9	0021_MW030_250403	03 Apr 2025 09:24	W	Ice	4	X						
10	0021_MW060_250401	01 Apr 2025 15:44	W	Ice	2	X						EXTRA SAMPLE FOR LAB QC
11	0021_MW063_250403	03 Apr 2025 14:51	W	Ice	2	X						
12	0021_MW064_250403	03 Apr 2025 13:44	W	Ice	2	X						
13	0021_MW065_250403	03 Apr 2025 12:32	W	Ice	2	X						
14	0021_MW070_250407	07 Apr 2025 10:18	W	Ice	4	X						EXTRA SAMPLE FOR LAB QC
15	0021_MW071_250407	07 Apr 2025 11:34	W	Ice	2	X						
16	0021_MW072_250407	07 Apr 2025 10:43	W	Ice	2	X						
17	0021_MW101_250404	04 Apr 2025 08:59	W	Ice	4	X						EXTRA SAMPLE FOR LAB QC
18	0021_MW102_250404	04 Apr 2025 09:45	W	Ice	4	X						EXTRA SAMPLE FOR LAB QC
19	0021_MW103_250403	03 Apr 2025 14:49	W	Ice	2	X						
20	0021_MW104_250403	03 Apr 2025 13:32	W	Ice	2	X						
21	0021_MW105_250403	03 Apr 2025 12:01	W	Ice	4	X						
22	0021_MW106_250404	04 Apr 2025 11:08	W	Ice	4	X						EXTRA SAMPLE FOR LAB QC
23	0021_MW107_250403	03 Apr 2025 11:38	W	Ice	2	X						EXTRA SAMPLE FOR LAB QC
24	0021_MW108_250404	04 Apr 2025 11:01	W	Ice	4	X						EXTRA SAMPLE FOR LAB QC
25	0021_MW109_250403	03 Apr 2025 13:35	W	Ice	2	X						
26	0021_MW110_250401	01 Apr 2025 14:24	W	Ice	2	X						
27	0021_MW111_250408	08 Apr 2025 08:47	W	Ice	2	X						
28	0021_MW112_250401	01 Apr 2025 13:41	W	Ice	2	X						
29	0021_MW113_250407	07 Apr 2025 11:35	W	Ice	4	X						
30	0021_MW114_250404	04 Apr 2025 09:30	W	Ice	4	X						EXTRA SAMPLE FOR LAB QC
31	0021_MW117_250402	02 Apr 2025 14:22	W	Ice	2	X						RA SAMPLE FOR LAB QC
32	0021_MW118_250402	02 Apr 2025 15:34	W	Ice	2	X						
33	0021_MW119_250402	02 Apr 2025 15:05	W	Ice	2	X						
34	0021_MW120_250402	02 Apr 2025 14:16	W	Ice	2	X						
35	0021_MW121_250402	02 Apr 2025 17:13	W	Ice	2	X						
36	0021_MW123_250402	02 Apr 2025 15:18	W	Ice	2	X						
37	0021_MW124_250403	03 Apr 2025 08:24	W	Ice	4	X						
38	0021_MW125_250402	02 Apr 2025 12:03	W	Ice	2	X						RA SAMPLE FOR LAB QC
39	0021_MW126_250401	01 Apr 2025 13:15	W	Ice	4	X						RA SAMPLE FOR LAB QC
40	0021_MW127_250402	02 Apr 2025 16:29	W	Ice	4	X						RA SAMPLE FOR LAB QC
41	0021_MW128_250402	02 Apr 2025 10:18	W	Ice	2	X						
42	0021_MW129_250404	04 Apr 2025 12:55	W	Ice	2		X					
43	0021_MW130_250404	04 Apr 2025	W	Ice	2							
44	0021_MW131_250401	01 Apr 2025 15:45	W	Ice	4	X						
45	0021_MW132_250401	01 Apr 2025 16:37	W	Ice	2	X						EXTRA SAMPLE FOR LAB QC
46	0021_MW133_250402	02 Apr 2025 11:50	W	Ice	4	X						
47	0021_MW134_250408	08 Apr 2025 08:14	W	Ice	2	X						EXTRA SAMPLE FOR LAB QC
48	0021_MW135_250404	04 Apr 2025 17:12	W	Ice	4		X					
49	0021_MW136_250404	04 Apr 2025 15:18	W	Ice	4		X					EXTRA SAMPLE FOR LAB QC
50	0021_MW137_250404	04 Apr 2025 14:01	W	Ice	4		X					EXTRA SAMPLE FOR LAB QC
51	0021_MW138_250403	03 Apr 2025 03:16	W	Ice	2		X					EXTRA SAMPLE FOR LAB QC
52	0021_MW139_250403	03 Apr 2025 12:15	W	Ice	4		X					
53	0021_MW140_250403	03 Apr 2025 01:35	W	Ice	2		X					EXTRA SAMPLE FOR LAB QC
54	0021_MW150_250404	04 Apr 2025 08:54	W	Ice	4	X						
55	0021_MW151_250404	04 Apr 2025 09:49	W	Ice	4	X						EXTRA SAMPLE FOR LAB QC
56	0021_MW152_250408	08 Apr 2025 08:10	W	Ice	2	X						EXTRA SAMPLE FOR LAB QC

Split WO
ES2510622 / ES2510623
Date: Extra
By / Date: QC222 → 206
Courier: QC208 → QC211
WO No: QC239 → 236
QC239 → 241
QC217 → 207

Environmental Division
Sydney
Work Order Reference
ES2510113

Telephone : +61-2-8784 8555

121 0052

CHAIN OF CUSTODY

ALS

CLIENT:
OFFICE:
PROJECT:
ORDER NUMBER:
PROJECT MANAGER: Helen Milne / Adam Schipp
SAMPLER: Jarrad Mawbey
SAMPLER MOBILE: 0411 379 023
COC emailed to ALS? (YES / NO)
EDD FORMAT (or default):
Email Reports to: jarrad.mawbey@ghd.com helen.milne@ghd.com ghdlabreports@ghd.com

TURNAROUND REQUIREMENT ☐ Standard TAT (List due date): STANDARD
(Standard TAT may be longer for some tests e.g. Ultra Trace Organics) ☐ Non Standard or urgent TAT (List due date):
ALS QUOTE NO.: ES23GHDSER0026
CONTACT PH: +61 410533326

COC SEQUENCE NUMBER (Circle)
COC: 1 2 3 4 5 6 7
OP: 1 2 3 4 5 6 7

FOR LABORATORY USE ONLY (Circle)
Custody Seal Intact? Yes No N/A
Free Ice / frozen ice bricks present upon receipt? Yes No N/A
Random Sample Temperature on Receipt:
Other comment:

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
DATE/TIME:	DATE/TIME:	DATE/TIME:	DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

ALS USE	SAMPLE DETAILS MATRIX: SOLID (S) WATER (W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).								
LAB ID	SAMPLE ID	Date and Time	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL CONTAINERS	EP231X (PFAS Full Suite)	PFAS - Super Trace Waters Long Suite (EP231X-ST)					HOLD		
57	0021_MW153_250404	04 Apr 2025 08:58	W	Ice	4	X								
58	0021_MW154_250404	04 Apr 2025 09:13	W	Ice	2	X								EXTRA SAMPLE FOR LAB QC
59	0021_MW155_250404	04 Apr 2025 10:06	W	Ice	4	X								
60	0021_MW160_250402	02 Apr 2025 09:32	W	Ice	2	X								EXTRA SAMPLE FOR LAB QC
61	0021_MW163_250402	02 Apr 2025 10:56	W	Ice	2	X								
62	0021_MW164_250402	02 Apr 2025 12:10	W	Ice	2	X								
63	0021_OTH001_250407	07 Apr 2025 12:24	W	Ice	4	X								
64	0021_OTH002_250407	07 Apr 2025 12:08	W	Ice	2	X								EXTRA SAMPLE FOR LAB QC
65	0021_OTH003_250407	07 Apr 2025 12:51	W	Ice	2	X								
66	0021_OTH005_250407	07 Apr 2025 13:06	W	Ice	2	X								
67	0021_OTH006_250407	07 Apr 2025 12:16	W	Ice	4	X								
68	0021_QC102_250331	31 Mar 2025 16:00	W	Ice	2	X								EXTRA SAMPLE FOR LAB QC
69	0021_QC103_250401	01 Apr 2025 08:55	W	Ice	2	X								
70	0021_QC104_250401	01 Apr 2025 13:42	W	Ice	2	X								
71	0021_QC105_250401	01 Apr 2025	W	Ice	2	X								
72	0021_QC106_250402	02 Apr 2025 09:30	W	Ice	2	X								
73	0021_QC107_250403	03 Apr 2025 10:00	W	Ice	2	X								
74	0021_QC108_250403	03 Apr 2025 12:15	W	Ice	2		X							
75	0021_QC109_250404	04 Apr 2025 09:30	W	Ice	2	X								
76	0021_QC110_250404	04 Apr 2025 10:45	S	Ice	2	X								
77	0021_QC111_250404	04 Apr 2025 16:25	S	Ice	2	X								
78	0021_QC134_250401	01 Apr 2025 15:45	W	Ice	2	X								
79	0021_QC135_250402	02 Apr 2025	W	Ice	2	X								
80	0021_QC136_250402	02 Apr 2025	S	Ice	2	X								
81	0021_QC139_250403	03 Apr 2025 14:20	S	Ice	2	X								
82	0021_QC140_250404	04 Apr 2025 08:58	W	Ice	2	X								
83	0021_QC141_250404	04 Apr 2025 13:28	S	Ice	2	X								
84	0021_QC154_250401	01 Apr 2025 13:41	W	Ice	2	X								
85	0021_QC155_250402	02 Apr 2025 10:18	W	Ice	2	X								
86	0021_QC156_250403	03 Apr 2025 11:38	W	Ice	2	X								
87	0021_QC157_250407	07 Apr 2025 12:24	W	Ice	2	X								
FWD	0021_QC202_250331	31 Mar 2025 16:00	W	Ice	2									PLEASE FORWARD TO EUROFINS USING ATTACHED COC
FWD	0021_QC203_250401	01 Apr 2025 08:55	W	Ice	2									PLEASE FORWARD TO EUROFINS USING ATTACHED COC
FWD	0021_QC204_250401	01 Apr 2025 13:42	W	Ice	2									PLEASE FORWARD TO EUROFINS USING ATTACHED COC
FWD	0021_QC205_250401	01 Apr 2025	W	Ice	2									PLEASE FORWARD TO EUROFINS USING ATTACHED COC
FWD	0021_QC206_250402	02 Apr 2025 09:30	W	Ice	2									PLEASE FORWARD TO EUROFINS USING ATTACHED COC
FWD	0021_QC208_250403	03 Apr 2025 12:15	W	Ice	2									PLEASE FORWARD TO EUROFINS USING ATTACHED COC
FWD	0021_QC209_250404	04 Apr 2025 09:30	W	Ice	2									PLEASE FORWARD TO EUROFINS USING ATTACHED COC
FWD	0021_QC210_250404	04 Apr 2025 10:45	S	Ice	2									PLEASE FORWARD TO EUROFINS USING ATTACHED COC
FWD	0021_QC211_250404	04 Apr 2025 16:25	S	Ice	2									PLEASE FORWARD TO EUROFINS USING ATTACHED COC
FWD	0021_QC234_250401	01 Apr 2025 15:45	W	Ice	2									PLEASE FORWARD TO EUROFINS USING ATTACHED COC
FWD	0021_QC235_250402	02 Apr 2025	W	Ice	2									PLEASE FORWARD TO EUROFINS USING ATTACHED COC
FWD	0021_QC236_250402	02 Apr 2025	S	Ice	2									PLEASE FORWARD TO EUROFINS USING ATTACHED COC
FWD	0021_QC239_250403	03 Apr 2025 14:20	S	Ice	2									PLEASE FORWARD TO EUROFINS USING ATTACHED COC
FWD	0021_QC240_250404	04 Apr 2025 08:58	W	Ice	2									PLEASE FORWARD TO EUROFINS USING ATTACHED COC
FWD	0021_QC241_250404	04 Apr 2025 13:28	S	Ice	2									PLEASE FORWARD TO EUROFINS USING ATTACHED COC
FWD	0021_QC254_250402	02 Apr 2025 09:32	W	Ice	2									PLEASE FORWARD TO EUROFINS USING ATTACHED COC
FWD	0021_QC255_250403	03 Apr 2025 09:24	W	Ice	2									PLEASE FORWARD TO EUROFINS USING ATTACHED COC
FWD	0021_QC256_250403	03 Apr 2025 12:01	W	Ice	2									PLEASE FORWARD TO EUROFINS USING ATTACHED COC
FWD	0021_QC257_250407	07 Apr 2025 12:24	W	Ice	2									PLEASE FORWARD TO EUROFINS USING ATTACHED COC
1	0021_SD001_250403	03 Apr 2025 13:52	S	Ice	1	X								
2	0021_SD002_250403	03 Apr 2025 15:10	S	Ice	1	X								
3	0021_SD003_250403	03 Apr 2025	S	Ice	1	X								
4	0021_SD004_250402	02 Apr 2025 08:30	S	Ice	1	X								
5	0021_SD005_250402	02 Apr 2025 08:52	S	Ice	1	X								
6	0021_SD006_250404	04 Apr 2025 16:13	S	Ice	1	X								

CHAIN OF CUSTODY

CLIENT:	TURNAROUND REQUIREMENT ☐ Standard TAT (List due date): STANDARD (Standard TAT may be longer for some tests e.g., Ultra Trace Organics) ☐ Non Standard or urgent TAT (List due date):	FOR LABORATORY USE ONLY (Circle) Custody Seal Intact? Yes No N/A Free ice / frozen ice bricks present upon receipt? Yes No N/A Random Sample Temperature on Receipt: °C Other comment:	
OFFICE: Sydney			
PROJECT: ACT 0021 PFASOMF 25	ALS QUOTE NO.: ES22GHDSER0026	COC SEQUENCE NUMBER (Circle) COC: 1 2 3 4 5 6 7 OF: 1 2 3 4 5 6 7	
ORDER NUMBER: 19926622			
PROJECT MANAGER: Helen Milne / Adam Schipp	CONTACT PH: +61 410533926		
SAMPLER: Jarrad Mawbey SAMPLER MOBILE: 0411 379 023	RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY: / RECEIVED BY:
COC emailed to ALS? (YES / NO) EDD FORMAT (or default):	DATE/TIME:	DATE/TIME:	DATE/TIME: / DATE/TIME:
Email Reports to: jarrad.mawbey@ghd.com; helen.milne@ghd.com; ahdlabreports@ghd.com			

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

ALS USE	SAMPLE DETAILS MATRIX: SOLID (S) WATER (W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).										
LAB ID	SAMPLE ID	Date and Time	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL CONTAINERS	EP231X (PFAS Full Suite)	PFAS - Super Trace Waters Long Suite (EP231X-ST)				HOLD					
7	0021_SD009_250401	01 Apr 2025 16:00	S	Ice	1	X										
8	0021_SD011_250401	01 Apr 2025 16:30	S	Ice	1	X										
9	0021_SD012_250402	02 Apr 2025 08:45	S	Ice	1	X										
10	0021_SD013_250402	02 Apr 2025 09:07	S	Ice	1	X										
11	0021_SD014_250402	02 Apr 2025 09:10	S	Ice	1	X										
12	0021_SD015_250403	03 Apr 2025 14:20	S	Ice	2	X										
13	0021_SD016_250402	02 Apr 2025 09:52	S	Ice	1	X										EXTRA SAMPLE FOR LAB QC
14	0021_SD017_250402	02 Apr 2025 09:30	S	Ice	1	X										
15	0021_SD018_250403	03 Apr 2025 16:05	S	Ice	1	X										
16	0021_SD020_250403	03 Apr 2025 15:25	S	Ice	1	X										
17	0021_SD021_250404	04 Apr 2025 15:33	S	Ice	1	X										
18	0021_SD023_250401	01 Apr 2025 14:05	S	Ice	1	X										
19	0021_SD028_250404	04 Apr 2025 13:45	S	Ice	1	X										
20	0021_SD029_250403	03 Apr 2025 10:00	S	Ice	1	X										
21	0021_SD030_250404	04 Apr 2025 16:20	S	Ice	1	X										
22	0021_SD031_250407	07 Apr 2025 08:36	S	Ice	1	X										
23	0021_SD035_250401	01 Apr 2025 14:02	S	Ice	1	X										
24	0021_SD036_250401	01 Apr 2025 12:51	S	Ice	1	X										
25	0021_SD037_250401	01 Apr 2025 11:52	S	Ice	1	X										
26	0021_SD040_250403	03 Apr 2025 15:39	S	Ice	1	X										
27	0021_SD043_250403	03 Apr 2025	S	Ice	1	X										
28	0021_SD044_250401	01 Apr 2025 13:42	S	Ice	1	X										
29	0021_SD046_250401	01 Apr 2025 14:30	S	Ice	1	X										
30	0021_SD049_250404	04 Apr 2025 14:41	S	Ice	1	X										
31	0021_SD050_250401	01 Apr 2025 09:26	S	Ice	1	X										
32	0021_SD054_250402	02 Apr 2025	S	Ice	1	X										
33	0021_SD058_250401	01 Apr 2025 08:55	S	Ice	1	X										
34	0021_SD059_250401	01 Apr 2025	S	Ice	1	X										
35	0021_SD066_250402	02 Apr 2025 09:55	S	Ice	1	X										
36	0021_SD067_250402	02 Apr 2025 09:40	S	Ice	1	X										
37	0021_SD068_250402	02 Apr 2025 09:30	S	Ice	1	X										
38	0021_SD069_250402	02 Apr 2025 08:54	S	Ice	1	X										
39	0021_SD070_250402	02 Apr 2025 08:22	S	Ice	1	X										
40	0021_SD073_250404	04 Apr 2025 10:45	S	Ice	1	X										
41	0021_SD075_250401	01 Apr 2025 10:40	S	Ice	1	X										
42	0021_SD080_250404	04 Apr 2025 13:28	S	Ice	1	X										
43	0021_SD093_250404	04 Apr 2025 16:25	S	Ice	1	X										
44	0021_SD110_250402	02 Apr 2025 08:36	S	Ice	1	X										
45	0021_SD111_250401	01 Apr 2025 12:19	S	Ice	1	X										
46	0021_SD188_250403	03 Apr 2025 08:09	S	Ice	1	X										
47	0021_SD188_A_250403	03 Apr 2025	S	Ice	2	X										
48	0021_SW001_250403	03 Apr 2025 13:52	W	Ice	2	X										
49	0021_SW003_250403	03 Apr 2025	W	Ice	2	X										
50	0021_SW004_250402	02 Apr 2025 08:30	W	Ice	2	X										
51	0021_SW005_250402	02 Apr 2025 08:36	W	Ice	2	X										
52	0021_SW006_250402	02 Apr 2025 08:52	W	Ice	2	X										
53	0021_SW010_250404	04 Apr 2025 16:13	W	Ice	2	X										
54	0021_SW012_250331	31 Mar 2025 15:00	W	Ice	2	X										
55	0021_SW013_250401	01 Apr 2025 16:00	W	Ice	2	X										
56	0021_SW018_250402	02 Apr 2025 09:10	W	Ice	2	X										
57	0021_SW019_250403	03 Apr 2025 14:20	W	Ice	2	X										
58	0021_SW020_250402	02 Apr 2025 09:52	W	Ice	2	X										
59	0021_SW021_250402	02 Apr 2025 09:30	W	Ice	4	X										
60	0021_SW022_250403	03 Apr 2025 16:05	W	Ice	2	X										EXTRA SAMPLE FOR LAB QC
61	0021_SW024_250403	03 Apr 2025 15:25	W	Ice	2	X										
62	0021_SW025_250404	04 Apr 2025 15:33	W	Ice	2	X										

CHAIN OF CUSTODY

ALS

CLIENT:
OFFICE:
PROJECT:
ORDER NUMBER:
PROJECT MANAGER:
SAMPLER:
SAMPLER MOBILE:
COC emailed to ALS? YES / NO
EDD FORMAT (or default):
Email Reports to:

TURNAROUND REQUIREMENT ☐ Standard TAT (List due date): STANDARD
☐ Non-Standard or urgent TAT (List due date):
ALS QUOTE NO.:
CONTACT PH:

COC SEQUENCE NUMBER (Circle)
COC: 1 2 3 4 5 6 7
OF: 1 2 3 4 5 6 7

FOR LABORATORY USE ONLY (Circle)
Custody Seal Intact? Yes No N/A
Free ice / frozen ice bricks present upon receipt? Yes No N/A
Random Sample Temperature on Receipt: °C
Other comment:

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
DATE/TIME:	DATE/TIME:	DATE/TIME:	DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

ALS USE	SAMPLE DETAILS MATRIX: SOLID (S) WATER (W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).							
LAB ID	SAMPLE ID	Date and Time	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL CONTAINERS	EP231X (PFAS Full Suite)	PFAS - Super Trace Waters Long Suite (EP231X-ST)				HOLD		
63	0021_SW027_250401	01 Apr 2025 14:05	W	Ice	2	X							
64	0021_SW032_250404	04 Apr 2025 13:28	W	Ice	2	X							
65	0021_SW034_250404	04 Apr 2025 13:45	W	Ice	2	X							
66	0021_SW035_250403	03 Apr 2025 10:00	W	Ice	2	X							
67	0021_SW036_250404	04 Apr 2025 16:20	W	Ice	2		X						
68	0021_SW037_250407	07 Apr 2025 08:36	W	Ice	4		X						
69	0021_SW040_250404	04 Apr 2025 16:25	W	Ice	2		X						EXTRA SAMPLE FOR LAB QC
70	0021_SW043_250401	01 Apr 2025 14:02	W	Ice	2	X							
71	0021_SW044_250401	01 Apr 2025 12:51	W	Ice	2	X							
72	0021_SW045_250401	01 Apr 2025 11:52	W	Ice	2	X							
73	0021_SW048_250403	03 Apr 2025 15:39	W	Ice	2	X							
74	0021_SW051_250403	03 Apr 2025	W	Ice	2	X							
75	0021_SW052_250401	01 Apr 2025 13:42	W	Ice	2	X							
76	0021_SW053_250401	01 Apr 2025 12:19	W	Ice	2	X							
77	0021_SW056_250401	01 Apr 2025 14:30	W	Ice	2	X							
78	0021_SW057_250401	01 Apr 2025	W	Ice	2	X							
79	0021_SW058_250401	01 Apr 2025 12:30	W	Ice	2	X							
80	0021_SW059_250404	04 Apr 2025 14:41	W	Ice	2	X							
1	0021_SW060_250401	01 Apr 2025 09:26	W	Ice	2	X							
2	0021_SW062_250402	02 Apr 2025	W	Ice	2	X							
3	0021_SW064_250402	02 Apr 2025	W	Ice	2	X							
4	0021_SW068_250401	01 Apr 2025 08:55	W	Ice	2	X							
5	0021_SW069_250401	01 Apr 2025	W	Ice	2	X							
6	0021_SW076_250402	02 Apr 2025 09:55	W	Ice	2	X							
7	0021_SW078_250402	02 Apr 2025 09:30	W	Ice	2	X							
8	0021_SW079_250402	02 Apr 2025 08:54	W	Ice	1	X							
9	0021_SW080_250402	02 Apr 2025 08:22	W	Ice	2	X							
10	0021_SW083_250404	04 Apr 2025 10:45	W	Ice	2	X							
11	0021_SW085_250401	01 Apr 2025 10:40	W	Ice	2	X							
12	0021_SW110_250403	03 Apr 2025 12:10	W	Ice	2	X							
13	0021_SW112_250403	03 Apr 2025 11:40	W	Ice	2	X							
14	0021_SW126_250403	03 Apr 2025 14:08	W	Ice	1	X							
15	0021_SW127_250401	01 Apr 2025 14:02	W	Ice	1	X							EXTRA SAMPLE FOR LAB QC
16	0021_SW130_250403	03 Apr 2025 14:44	W	Ice	2	X							EXTRA SAMPLE FOR LAB QC
17	0021_SW153_250331	31 Mar 2025 16:00	W	Ice	4	X							EXTRA SAMPLE FOR LAB QC
18	0021_SW188_250403	03 Apr 2025 08:09	W	Ice	2	X							
19	0021_SW211_250403	03 Apr 2025 09:09	W	Ice	2	X							
20	0021_SW212_250404	04 Apr 2025 11:00	W	Ice	2	X							
21	0021_QC300_250401	1/04/2025	W	Ice	2	X							
22	0021_QC301_250402	2/04/2025	W	Ice	2	X							
23	0021_QC302_250403	3/04/2025	W	Ice	2	X							
24	0021_QC331_250401	1/04/2025	W	Ice	2	X							
25	0021_QC332_250402	2/04/2025	W	Ice	2	X							
26	0021_QC333_250403	3/04/2025	W	Ice	2	X							
27	0021_QC334_250404	4/04/2025	W	Ice	2	X							
28	0021_QC335_250407	7/04/2025	W	Ice	2	X							
29	0021_QC351_250401	1/04/2025	W	Ice	2	X							
30	0021_QC352_250402	2/04/2025	W	Ice	2	X							
31	0021_QC353_250402	2/04/2025	W	Ice	2	X							
32	0021_QC354_250403	3/04/2025	W	Ice	2	X							
33	0021_QC355_250404	4/04/2025	W	Ice	2	X							
34	0021_QC356_250404	4/04/2025	W	Ice	2	X							
35	0021_QC357_250407	7/04/2025	W	Ice	2	X							
36	0021_QC381_250403	3/04/2025	W	Ice	2	X							
37	0021_QC382_250404	4/04/2025	W	Ice	2	X							
38	0021_QC383_250407	7/04/2025	W	Ice	2	X							

CHAIN OF CUSTODY

CLIENT:
OFFICE:
PROJECT:
ORDER NUMBER:
PROJECT MANAGER:
SAMPLER:
SAMPLER MOBILE:
COC emailed to ALS? | YES | NO
EDD FORMAT (or default):
Email Reports to:

TURNAROUND REQUIREMENT ☐ Standard TAT (List due date):
(Standard TAT may be longer for some tests)
☐ Non-Standard or Urgent TAT (List due date):
ALS QUOTE NO.:
CONTACT PH:

COC SEQUENCE NUMBER (Circle)
COC: 1 2 3 4 5 6 7
OP: 1 2 3 4 5 6 7

FOR LABORATORY USE ONLY (Circle)
Custody Seal Intact? Yes No N/A
Free ice / frozen ice bricks present upon receipt? Yes No N/A
Random Sample Temperature on Receipt:
Other comment:

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
DATE/TIME:	DATE/TIME:	DATE/TIME:	DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

ALS USE	SAMPLE DETAILS MATRIX: SOLID (S) WATER (W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).								
LAB ID	SAMPLE ID	Date and Time	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL CONTAINERS	EP231X (PFAS Full Suite)	PFAS - Super Trace Waters Long Suite (EP231X-ST)				HOLD			
39	0021_QC502_250401	1/04/2025	W		2	X								
40	0021_QC503_250401	1/04/2025	W		2						X			
41	0021_QC505_250331	31/03/2025	S		1	X								
42	0021_QC506_250331	31-Mar	S		1						X			

eurofins mgt

Sydney
Unit F3 - 6 Building F, 16 Mars Road, Lane Cove
Phone: +612 9900 8400
Email: enviro.syd@mgtlabmark.com.au

Brisbane
Unit 1-21 Smallwood Place, Murrarie
Phone: +617 3902 4600
Email: enviro.bris@mgtlabmark.com.au

Melbourne
2 Kingston Town Close, Oakleigh, VIC 3166
Phone: +613 8564 5000 Fax: +613 8564 5090
Email: enquiries.melb@mgtlabmark.com.au

CHAIN OF CUSTODY RECORD

CLIENT DETAILS

Company Name : GHD Pty Ltd
Office Address : Level 15, 133 Castlereagh Street, Sydney NSW 2000
Contact Name : Jarrad Mawby 0411 379 032
Project Manager : Helen Mil[illegible] / Adam Shipp
Email for results : jarrad.mawby@ghd.com; helen.miller@ghd.com; ghdfuturereports@ghd.com
Purchase Order :
PROJECT Number : 12626622
PROJECT Name : ACT_0021_PFASOMP_25
COC Number :
Eurofins | mgt quote ID :
Data output format: ESDAT

Special Directions & Comments :

Forwarded from ALS

Eurofins | mgt DI water batch number:

Analytes

	Sample ID	Date	Matrix	PFAS Extended Suite - 30 PFAS	PFAS Extended Suite - 30 PFAS - Super Trace				HOLD							
1	0021_QC202_250331	31 Mar 2025 16:00	W	X												
2	0021_QC203_250401	01 Apr 2025 08:55	W	X												
3	0021_QC204_250401	01 Apr 2025 13:42	W	X												
4	0021_QC205_250401	01 Apr 2025	W	X												
5	0021_QC206_250402	02 Apr 2025 09:30	W	X												
6	0021_QC208_250403	03 Apr 2025 12:15	W		X											
7	0021_QC209_250404	04 Apr 2025 09:30	W	X												
8	0021_QC210_250404	04 Apr 2025 10:45	S	X												
9	0021_QC211_250404	04 Apr 2025 16:25	S	X												
10	0021_QC234_250401	01 Apr 2025 15:45	W	X												
11	0021_QC235_250402	02 Apr 2025	W	X												
12	0021_QC236_250402	02 Apr 2025	S	X												
13	0021_QC239_250403	03 Apr 2025 14:20	S	X												
14	0021_QC240_250404	04 Apr 2025 08:58	W	X												
15	0021_QC241_250404	04 Apr 2025 13:28	S	X												
16	0021_QC254_250402	02 Apr 2025 09:32	W	X												
17	0021_QC255_250403	03 Apr 2025 09:24	W	X												
18	0021_QC256_250403	03 Apr 2025 12:01	W	X												
19	0021_QC257_250407	07 Apr 2025 12:24	W	X												

Some common holding times (with correct preservation).
For further information contact the lab

Waters		Soils	
BTEX, MAH, VOC	14 days	BTEX, MAH, VOC	14 days
TRH, PAH, Phenols, Pesticides	7 days	TRH, PAH, Phenols, Pesticides	14 days
Heavy Metals	6 months	Heavy Metals	6 months
Mercury, CrVI	28 days	Mercury, CrVI	28 days
Microbiological testing	24 hours	Microbiological testing	72 hours
BOD, Nitrate, Nitrite, Total N	2 days	Anions	28 days
Solids - TSS, TDS etc	7 days	SPOCAS, pH Field and FOX, CrS	24 hours
Ferrous iron	7 days	ASLP, TCLP	7 days

Containers:								Sample comments:
500P	250P	60P	1LA	40mL vial	250mL A	Jar	Bag	
								2x Containers
								2x Containers
								2x Containers
								2x Containers
								2x Containers
								2x Containers
								2x Containers
								1x Containers
								1x Containers
								2x Containers
								2x Containers
								1x Containers
								1x Containers
								2x Containers
								1x Containers
								2x Containers
								2x Containers
								2x Containers
								2x Containers

Relinquished By: Andrew Duval (GHD)
Date & Time : 8/4/2025
Signature: A.Duval

Turn around time

1 DAY ☐ 2 DAY ☐ 3 DAY ☐
5 DAY ☐ 10 DAY ☐ Other:

Method Of Shipment

☐ Courier
☐ Hand Delivered
☐ Postal
Courier Consignment # :

Temperature on arrival:

Report number:

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Eurofins Environment Testing Australia Pty Ltd

ABN: 50 005 085 521

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

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Perth
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Welshpool
WA 6106
+61 8 6253 4444
NATA# 2377
Site# 2370 & 2554

Eurofins Environment Testing NZ Ltd

NZBN: 9429046024954

Auckland	Auckland (Focus)	Christchurch	Tauranga
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Penrose	Mount Wellington	Rolleston	Gate Pa
Auckland 1061	Auckland 1061	Christchurch 7675	Tauranga 3112
+64 9 526 4551	+64 9 525 0568	+64 3 343 5201	+64 9 525 0568
IANZ# 1327	IANZ# 1308	IANZ# 1290	IANZ# 1402

Sample Receipt Advice

Company name:	GHD Pty Ltd NSW
Contact name:	Helen Milne
Project name:	ACT_0021_PFASOMP_25
Project ID:	12626622
Turnaround time:	5 Day
Date/Time received	Apr 14, 2025 1:18 PM
Eurofins reference	1210052

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 : .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.
X	Split sample sent to requested external lab.
X	Some samples have been subcontracted.
N/A	Custody Seals intact (if used).

Notes

Contact

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

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

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

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

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 **1210052-S**
Project name ACT_0021_PFASOMP_25
Project ID 12626622
Received Date Apr 14, 2025

Client Sample ID			**0021_QC204_250401**	**0021_QC210_250404**	**0021_QC211_250404**	**0021_QC235_250402**
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S25-Ap0044104**	**S25-Ap0044109**	**S25-Ap0044110**	**S25-Ap0044112**
Date Sampled			**Apr 01, 2025**	**Apr 04, 2025**	**Apr 04, 2025**	**Apr 02, 2025**
Test/Reference	LOR	Unit				
Sample Properties						
% Moisture	1	%	19	30	30	92
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanoic acid (PFPeA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanoic acid (PFHxA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanoic acid (PFHpA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanoic acid (PFOA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanoic acid (PFNA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanoic acid (PFDA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroundecanoic acid (PFUnDA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorododecanoic acid (PFDoDA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotridecanoic acid (PFTrDA)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotetradecanoic acid (PFTeDA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
13C4-PFBA (surr.)	1	%	74	63	64	61
13C5-PFPeA (surr.)	1	%	119	106	111	112
13C5-PFHxA (surr.)	1	%	130	123	125	111
13C4-PFHpA (surr.)	1	%	107	108	115	90
13C8-PFOA (surr.)	1	%	91	90	98	80
13C5-PFNA (surr.)	1	%	98	105	91	88
13C6-PFDA (surr.)	1	%	97	105	112	87
13C2-PFUnDA (surr.)	1	%	118	94	113	92
13C2-PFDoDA (surr.)	1	%	119	114	139	103
13C2-PFTeDA (surr.)	1	%	112	110	109	92
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)[N11]	5	ug/kg	< 5	< 5	< 5	7.3
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)[N11]	5	ug/kg	< 5	< 5	< 5	8.5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	10	ug/kg	< 10	< 10	< 10	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	10	ug/kg	< 10	< 10	< 10	< 10

Client Sample ID			0021_QC204_250401	0021_QC210_250404	0021_QC211_250404	0021_QC235_250402
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S25-Ap0044104	S25-Ap0044109	S25-Ap0044110	S25-Ap0044112
Date Sampled			Apr 01, 2025	Apr 04, 2025	Apr 04, 2025	Apr 02, 2025
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonamido substances						
13C8-FOSA (surr.)	1	%	132	113	101	89
D3-N-MeFOSA (surr.)	1	%	145	149	133	100
D5-N-EtFOSA (surr.)	1	%	131	139	117	113
D7-N-MeFOSE (surr.)	1	%	113	101	84	79
D9-N-EtFOSE (surr.)	1	%	114	110	78	106
D5-N-EtFOSAA (surr.)	1	%	111	115	147	99
D3-N-MeFOSAA (surr.)	1	%	124	110	INT	86
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanesulfonic acid (PFNS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropropanesulfonic acid (PFPrS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanesulfonic acid (PFPeS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanesulfonic acid (PFHxS)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanesulfonic acid (PFHpS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanesulfonic acid (PFOS)[N11]	5	ug/kg	< 5	< 5	< 5	5.1
Perfluorodecanesulfonic acid (PFDS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
13C3-PFBS (surr.)	1	%	125	129	130	108
18O2-PFHxS (surr.)	1	%	95	97	105	62
13C8-PFOS (surr.)	1	%	98	132	113	115
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)[N11]	10	ug/kg	< 10	< 10	< 10	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
13C2-4:2 FTSA (surr.)	1	%	84	65	106	66
13C2-6:2 FTSA (surr.)	1	%	79	72	103	81
13C2-8:2 FTSA (surr.)	1	%	92	74	177	70
13C2-10:2 FTSA (surr.)	1	%	92	118	190	118
PFASs Summations						
Sum (PFHxS + PFOS)*	5	ug/kg	< 5	< 5	< 5	5.1
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5	5.1
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5	5.1
Sum of WA DWER PFAS (n=10)*	10	ug/kg	< 10	< 10	< 10	< 10
Sum of PFASs (n=30)*	50	ug/kg	< 50	< 50	< 50	< 50

Client Sample ID			0021_QC239_250403	0021_QC241_250404
Sample Matrix			Soil	Soil
Eurofins Sample No.			S25-Ap0044114	S25-Ap0044116
Date Sampled			Apr 03, 2025	Apr 04, 2025
Test/Reference	LOR	Unit		
Sample Properties				
% Moisture	1	%	20	34
Perfluoroalkyl carboxylic acids (PFCAs)				
Perfluorobutanoic acid (PFBA)[N11]	5	ug/kg	< 5	< 5
Perfluoropentanoic acid (PFPeA)[N11]	5	ug/kg	< 5	< 5
Perfluorohexanoic acid (PFHxA)[N11]	5	ug/kg	< 5	< 5
Perfluoroheptanoic acid (PFHpA)[N11]	5	ug/kg	< 5	< 5
Perfluorooctanoic acid (PFOA)[N11]	5	ug/kg	< 5	< 5
Perfluorononanoic acid (PFNA)[N11]	5	ug/kg	< 5	< 5
Perfluorodecanoic acid (PFDA)[N11]	5	ug/kg	< 5	< 5
Perfluoroundecanoic acid (PFUnDA)[N11]	5	ug/kg	< 5	< 5
Perfluorododecanoic acid (PFDoDA)[N11]	5	ug/kg	< 5	< 5
Perfluorotridecanoic acid (PFTrDA)[N15]	5	ug/kg	< 5	< 5
Perfluorotetradecanoic acid (PFTeDA)[N11]	5	ug/kg	< 5	< 5
13C4-PFBA (surr.)	1	%	70	64
13C5-PFPeA (surr.)	1	%	118	97
13C5-PFHxA (surr.)	1	%	140	126
13C4-PFHpA (surr.)	1	%	111	94
13C8-PFOA (surr.)	1	%	88	89
13C5-PFNA (surr.)	1	%	101	97
13C6-PFDA (surr.)	1	%	101	111
13C2-PFUnDA (surr.)	1	%	112	90
13C2-PFDoDA (surr.)	1	%	119	100
13C2-PFTeDA (surr.)	1	%	105	111
Perfluoroalkyl sulfonamido substances				
Perfluorooctane sulfonamide (FOSA)[N11]	5	ug/kg	< 5	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	5	ug/kg	< 5	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	5	ug/kg	< 5	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)[N11]	5	ug/kg	< 5	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)[N11]	5	ug/kg	< 5	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	10	ug/kg	< 10	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	10	ug/kg	< 10	< 10
13C8-FOSA (surr.)	1	%	136	96
D3-N-MeFOSA (surr.)	1	%	159	145
D5-N-EtFOSA (surr.)	1	%	120	109
D7-N-MeFOSE (surr.)	1	%	99	92
D9-N-EtFOSE (surr.)	1	%	98	84
D5-N-EtFOSAA (surr.)	1	%	120	101
D3-N-MeFOSAA (surr.)	1	%	100	102
Perfluoroalkyl sulfonic acids (PFSAs)				
Perfluorobutanesulfonic acid (PFBS)[N11]	5	ug/kg	< 5	< 5
Perfluorononanesulfonic acid (PFNS)[N15]	5	ug/kg	< 5	< 5
Perfluoropropanesulfonic acid (PFPrS)[N15]	5	ug/kg	< 5	< 5
Perfluoropentanesulfonic acid (PFPeS)[N15]	5	ug/kg	< 5	< 5
Perfluorohexanesulfonic acid (PFHxS)[N11]	5	ug/kg	[N09]< 5	< 5
Perfluoroheptanesulfonic acid (PFHpS)[N15]	5	ug/kg	< 5	< 5

Client Sample ID			0021_QC239_250403	0021_QC241_250404
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S25-Ap0044114**	**S25-Ap0044116**
Date Sampled			**Apr 03, 2025**	**Apr 04, 2025**
Test/Reference	LOR	Unit		
Perfluoroalkyl sulfonic acids (PFSAs)				
Perfluorooctanesulfonic acid (PFOS)[N11]	5	ug/kg	[N09]17	< 5
Perfluorodecanesulfonic acid (PFDS)[N15]	5	ug/kg	< 5	< 5
13C3-PFBS (surr.)	1	%	143	127
18O2-PFHxS (surr.)	1	%	87	103
13C8-PFOS (surr.)	1	%	137	117
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	5	ug/kg	< 5	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)[N11]	10	ug/kg	< 10	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	5	ug/kg	< 5	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	5	ug/kg	< 5	< 5
13C2-4:2 FTSA (surr.)	1	%	66	75
13C2-6:2 FTSA (surr.)	1	%	71	76
13C2-8:2 FTSA (surr.)	1	%	147	103
13C2-10:2 FTSA (surr.)	1	%	123	102
PFASs Summations				
Sum (PFHxS + PFOS)*	5	ug/kg	17	< 5
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	17	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	17	< 5
Sum of WA DWER PFAS (n=10)*	10	ug/kg	17	< 10
Sum of PFASs (n=30)*	50	ug/kg	< 50	< 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	Sydney	Apr 15, 2025	14 Days
- Method: LTM-GEN-7080 Moisture			
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs)	Sydney	Apr 16, 2025	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Sydney	Apr 16, 2025	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Sydney	Apr 16, 2025	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Sydney	Apr 16, 2025	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

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VIC 3175	VIC 3216	NSW 2145	ACT 2911	QLD 4172	NSW 2304
+61 3 8564 5000	+61 3 8564 5000	+61 2 9900 8400	+61 2 6113 8091	+61 7 3902 4600	+61 2 4968 8448
NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261
Site# 1254	Site# 25403	Site# 18217	Site# 25466	Site# 20794 & 2780	Site# 25079

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

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

Project Name: ACT_0021_PFASOMP_25
Project ID: 12626622

Order No.:
Report #: 1210052
Phone: 02 9239 7100
Fax: 02 9239 7199

Received: Apr 14, 2025 1:18 PM
Due: Apr 23, 2025
Priority: 5 Day
Contact Name: Helen Milne

Eurofins Analytical Services Manager : Adam Bateup

Sample Detail						Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	Per- and Polyfluoroalkyl Substances (PFASs) - Ultra Trace
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X
External Laboratory								
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**			
1	0021_QC202_250331	Mar 31, 2025		Water	S25-Ap0044102		X	
2	0021_QC203_250401	Apr 01, 2025		Water	S25-Ap0044103		X	
3	0021_QC204_250401	Apr 01, 2025		Soil	S25-Ap0044104	X	X	
4	0021_QC205_250401	Apr 01, 2025		Water	S25-Ap0044105		X	
5	0021_QC206_250402	Apr 02, 2025		Water	S25-Ap0044106		X	
6	0021_QC208_250403	Apr 03, 2025		Water	S25-Ap0044107			X
7	0021_QC209_250404	Apr 04, 2025		Water	S25-Ap0044108		X	
8	0021_QC210_250404	Apr 04, 2025		Soil	S25-Ap0044109	X	X	
9	0021_QC211_	Apr 04, 2025		Soil	S25-Ap0044110	X	X	

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ABN: 50 005 085 521

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NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261
Site# 1254	Site# 25403	Site# 18217	Site# 25466	Site# 20794 & 2780	Site# 25079

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

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

Project Name: ACT_0021_PFASOMP_25
Project ID: 12626622

Order No.:
Report #: 1210052
Phone: 02 9239 7100
Fax: 02 9239 7199

Received: Apr 14, 2025 1:18 PM
Due: Apr 23, 2025
Priority: 5 Day
Contact Name: Helen Milne

Eurofins Analytical Services Manager : Adam Bateup

Sample Detail						Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	Per- and Polyfluoroalkyl Substances (PFASs) - Ultra Trace
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X
	250404							
10	0021_QC234_250401	Apr 01, 2025		Water	S25-Ap0044111		X	
11	0021_QC235_250402	Apr 02, 2025		Soil	S25-Ap0044112	X	X	
12	0021_QC236_250402	Apr 02, 2025		Water	S25-Ap0044113		X	
13	0021_QC239_250403	Apr 03, 2025		Soil	S25-Ap0044114	X	X	
14	0021_QC240_250404	Apr 04, 2025		Water	S25-Ap0044115		X	
15	0021_QC241_250404	Apr 04, 2025		Soil	S25-Ap0044116	X	X	
16	0021_QC254_250402	Apr 02, 2025		Water	S25-Ap0044117		X	
17	0021_QC255_250403	Apr 03, 2025		Water	S25-Ap0044118		X	
18	0021_QC256_250403	Apr 03, 2025		Water	S25-Ap0044119		X	
19	0021_QC257_	Apr 07, 2025		Water	S25-Ap0044120		X	

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VIC 3175	VIC 3216	NSW 2145	ACT 2911	QLD 4172	NSW 2304
+61 3 8564 5000	+61 3 8564 5000	+61 2 9900 8400	+61 2 6113 8091	+61 7 3902 4600	+61 2 4968 8448
NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261
Site# 1254	Site# 25403	Site# 18217	Site# 25466	Site# 20794 & 2780	Site# 25079

Eurofins ARL Pty Ltd
ABN: 91 05 0159 898

Perth
46-48 Banksia Road
Welshpool
WA 6106
+61 8 6253 4444
NATA# 2377
Site# 2370 & 2554

Eurofins Environment Testing NZ Ltd
NZBN: 9429046024954

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

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

Project Name: ACT_0021_PFASOMP_25
Project ID: 12626622

Order No.:
Report #: 1210052
Phone: 02 9239 7100
Fax: 02 9239 7199

Received: Apr 14, 2025 1:18 PM
Due: Apr 23, 2025
Priority: 5 Day
Contact Name: Helen Milne

Eurofins Analytical Services Manager : Adam Bateup

Sample Detail						Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	Per- and Polyfluoroalkyl Substances (PFASs) - Ultra Trace
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X
19	0021_QC257_250407	Apr 07, 2025		Water	S25-Ap0044120			
Test Counts						6	18	1

Internal Quality Control Review and Glossary

General

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

Holding Times

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

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours before sample receipt deadlines as stated on the SRA.

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

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

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

Units

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

Terms

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

QC - Acceptance Criteria

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

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

Results <10 times the LOR:	No Limit
Results between 10-20 times the LOR:	RPD must lie between 0-50%
Results >20 times the LOR:	RPD must lie between 0-30%

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

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

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

QC Data General Comments

1. Where a result is reported as less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown are not data from your samples.
3. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time.Analysis will begin as soon as possible after sample receipt.
4. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery, the term "INT" appears against that analyte.
5. For Matrix Spikes and LCS results, a dash "-" in the report means that the specific analyte was not added to the QC sample.
6. Duplicate RPDs are calculated from raw analytical data; thus, it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	ug/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 (PFTrDA)	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 (PFSAs)							
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 FTSAs)							
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)	%	103			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	89			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	92			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	90			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	69			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	99			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	92			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	82			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	95			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	102			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	98			50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	%	75			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	59			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	76			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	%	115			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	%	81			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	84			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	74			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	94			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	%	87			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	%	81			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	72			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	99			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	%	71			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	82			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	58			50-150	Pass	
LCS - % Recovery							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	98			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	%	78			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	87			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	107			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-Ap0044109	CP	%	101			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	S25-Ap0044109	CP	%	85			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	S25-Ap0044109	CP	%	86			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	S25-Ap0044109	CP	%	84			50-150	Pass	
Perfluorooctanoic acid (PFOA)	S25-Ap0044109	CP	%	80			50-150	Pass	
Perfluorononanoic acid (PFNA)	S25-Ap0044109	CP	%	101			50-150	Pass	
Perfluorodecanoic acid (PFDA)	S25-Ap0044109	CP	%	82			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	S25-Ap0044109	CP	%	93			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	S25-Ap0044109	CP	%	85			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	S25-Ap0044109	CP	%	95			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	S25-Ap0044109	CP	%	98			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonamido substances				Result 1					
Perfluorooctane sulfonamide (FOSA)	S25-Ap0044109	CP	%	86			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	S25-Ap0044109	CP	%	57			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	S25-Ap0044109	CP	%	92			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	S25-Ap0044109	CP	%	91			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	S25-Ap0044109	CP	%	59			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-Ap0044109	CP	%	96			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	S25-Ap0044109	CP	%	86			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1					
Perfluorobutanesulfonic acid (PFBS)	S25-Ap0044109	CP	%	69			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	S25-Ap0044109	CP	%	79			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	S25-Ap0044109	CP	%	63			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	S25-Ap0044109	CP	%	64			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	S25-Ap0044109	CP	%	103			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	S25-Ap0044109	CP	%	73			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	S25-Ap0044109	CP	%	75			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	S25-Ap0044109	CP	%	54			50-150	Pass	
Spike - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	S25-Ap0044109	CP	%	131			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	S25-Ap0044109	CP	%	72			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	S25-Ap0044109	CP	%	83			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	S25-Ap0044109	CP	%	99			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-Ap0044104	CP	%	19	21	9.0	30%	Pass	
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	S25-Ap0044104	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	S25-Ap0044104	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	S25-Ap0044104	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	S25-Ap0044104	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	S25-Ap0044104	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	S25-Ap0044104	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	S25-Ap0044104	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	S25-Ap0044104	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	S25-Ap0044104	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	S25-Ap0044104	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	S25-Ap0044104	CP	ug/kg	< 5	< 5	<1	30%	Pass	

Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	S25-Ap0044104	CP	ug/kg	< 5	< 5	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	S25-Ap0044104	CP	ug/kg	< 5	< 5	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	S25-Ap0044104	CP	ug/kg	< 5	< 5	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	S25-Ap0044104	CP	ug/kg	< 5	< 5	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	S25-Ap0044104	CP	ug/kg	< 5	< 5	<1	30%	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	S25-Ap0044104	CP	ug/kg	< 10	< 10	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	S25-Ap0044104	CP	ug/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	S25-Ap0044104	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)	S25-Ap0044104	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)	S25-Ap0044104	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	S25-Ap0044104	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	S25-Ap0044104	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	S25-Ap0044104	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	S25-Ap0044104	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	S25-Ap0044104	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Duplicate									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1	Result 2	RPD			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	S25-Ap0044104	CP	ug/kg	< 5	< 5	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	S25-Ap0044104	CP	ug/kg	< 10	< 10	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	S25-Ap0044104	CP	ug/kg	< 5	< 5	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	S25-Ap0044104	CP	ug/kg	< 5	< 5	<1	30%	Pass	

Comments

Sample Integrity

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

Qualifier Codes/Comments

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

Authorised by:

Nileshni Goundar	Analytical Services Manager
Roopesh Rangarajan	Senior Analyst-PFAS
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

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 **1210052-W**
Project name ACT_0021_PFASOMP_25
Project ID 12626622
Received Date Apr 14, 2025

Client Sample ID			**0021_QC202_250331**	**0021_QC203_250401**	**0021_QC205_250401**	**0021_QC206_250402**
Sample Matrix			**Water**	**Water**	**Water**	**Water**
Eurofins Sample No.			**S25-Ap0044102**	**S25-Ap0044103**	**S25-Ap0044105**	**S25-Ap0044106**
Date Sampled			**Mar 31, 2025**	**Apr 01, 2025**	**Apr 01, 2025**	**Apr 02, 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	0.02	< 0.01	< 0.01	0.02
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	0.10	< 0.01	< 0.01	0.05
Perfluoroheptanoic acid (PFHpA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	0.03	< 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	%	130	125	108	124
13C5-PFPeA (surr.)	1	%	140	126	109	121
13C5-PFHxA (surr.)	1	%	125	118	116	141
13C4-PFHpA (surr.)	1	%	179	144	106	138
13C8-PFOA (surr.)	1	%	146	123	102	142
13C5-PFNA (surr.)	1	%	117	128	101	126
13C6-PFDA (surr.)	1	%	127	126	98	119
13C2-PFUnDA (surr.)	1	%	128	116	90	97
13C2-PFDoDA (surr.)	1	%	98	103	81	92
13C2-PFTeDA (surr.)	1	%	95	93	53	119
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	%	120	112	95	101
D3-N-MeFOSA (surr.)	1	%	118	115	57	88

Client Sample ID			0021_QC202_250331	0021_QC203_250401	0021_QC205_250401	0021_QC206_250402
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S25-Ap0044102	S25-Ap0044103	S25-Ap0044105	S25-Ap0044106
Date Sampled			Mar 31, 2025	Apr 01, 2025	Apr 01, 2025	Apr 02, 2025
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonamido substances						
D5-N-EtFOSA (surr.)	1	%	85	77	39	64
D7-N-MeFOSE (surr.)	1	%	102	99	75	86
D9-N-EtFOSE (surr.)	1	%	100	91	64	80
D5-N-EtFOSAA (surr.)	1	%	102	113	96	110
D3-N-MeFOSAA (surr.)	1	%	118	111	103	108
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS)[N11]	0.01	ug/L	0.04	< 0.01	< 0.01	0.03
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	0.05	< 0.01	< 0.01	0.03
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.01	ug/L	0.74	< 0.01	< 0.01	0.33
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.01	ug/L	0.04	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	1.7	< 0.01	< 0.01	0.17
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	127	127	132	137
18O2-PFHxS (surr.)	1	%	145	116	104	125
13C8-PFOS (surr.)	1	%	121	128	113	126
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 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	%	INT	200	151	176
13C2-6:2 FTSA (surr.)	1	%	172	133	108	149
13C2-8:2 FTSA (surr.)	1	%	109	112	94	130
13C2-10:2 FTSA (surr.)	1	%	109	107	97	98
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	2.44	< 0.01	< 0.01	0.5
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	1.73	< 0.01	< 0.01	0.17
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	2.47	< 0.01	< 0.01	0.5
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	2.63	< 0.05	< 0.05	0.6
Sum of PFASs (n=30)*	0.1	ug/L	2.72	< 0.1	< 0.1	0.63

Client Sample ID			0021_QC208_250403	0021_QC209_250404	0021_QC234_250401	0021_QC236_250402
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S25-Ap0044107	S25-Ap0044108	S25-Ap0044111	S25-Ap0044113
Date Sampled			Apr 03, 2025	Apr 04, 2025	Apr 01, 2025	Apr 02, 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	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	-	< 0.01	0.01	< 0.01
Perfluoroheptanoic acid (PFHpA)[N11]	0.01	ug/L	-	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	-	< 0.01	< 0.01	< 0.01
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 (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	%	-	131	112	124
13C5-PFPeA (surr.)	1	%	-	126	119	122
13C5-PFHxA (surr.)	1	%	-	127	123	160
13C4-PFHpA (surr.)	1	%	-	133	124	124
13C8-PFOA (surr.)	1	%	-	154	127	119
13C5-PFNA (surr.)	1	%	-	138	125	127
13C6-PFDA (surr.)	1	%	-	145	128	136
13C2-PFUnDA (surr.)	1	%	-	132	117	98
13C2-PFDoDA (surr.)	1	%	-	125	116	109
13C2-PFTeDA (surr.)	1	%	-	121	184	110
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	%	-	126	115	115
D3-N-MeFOSA (surr.)	1	%	-	123	102	94
D5-N-EtFOSA (surr.)	1	%	-	87	87	75
D7-N-MeFOSE (surr.)	1	%	-	99	92	85
D9-N-EtFOSE (surr.)	1	%	-	98	89	81
D5-N-EtFOSAA (surr.)	1	%	-	183	138	181
D3-N-MeFOSAA (surr.)	1	%	-	149	133	159
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	< 0.01
Perfluoropropanesulfonic acid (PFPrS)[N15]	0.01	ug/L	-	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS)[N15]	0.01	ug/L	-	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.01	ug/L	-	< 0.01	0.04	< 0.01
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.01	ug/L	-	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	-	< 0.01	0.05	< 0.01
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	-	< 0.01	< 0.01	< 0.01

Client Sample ID			0021_QC208_250403	0021_QC209_250404	0021_QC234_250401	0021_QC236_250402
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S25-Ap0044107	S25-Ap0044108	S25-Ap0044111	S25-Ap0044113
Date Sampled			Apr 03, 2025	Apr 04, 2025	Apr 01, 2025	Apr 02, 2025
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonic acids (PFSAs)						
13C3-PFBS (surr.)	1	%	-	137	157	129
18O2-PFHxS (surr.)	1	%	-	112	117	121
13C8-PFOS (surr.)	1	%	-	133	122	104
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	-	< 0.01	< 0.01	< 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	%	-	157	194	INT
13C2-6:2 FTSA (surr.)	1	%	-	168	120	136
13C2-8:2 FTSA (surr.)	1	%	-	142	112	152
13C2-10:2 FTSA (surr.)	1	%	-	199	143	186
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	-	< 0.01	0.09	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	-	< 0.01	0.05	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	-	< 0.01	0.09	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	-	< 0.05	0.1	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	-	< 0.1	0.1	< 0.1
Perfluoroalkyl carboxylic acids (PFCAs) - Ultra Trace						
Perfluorobutanoic acid (PFBA)[N11]	0.005	ug/L	< 0.005	-	-	-
Perfluorodecanoic acid (PFDA)[N11]	0.001	ug/L	< 0.001	-	-	-
Perfluorododecanoic acid (PFDoDA)[N11]	0.001	ug/L	< 0.001	-	-	-
Perfluoroheptanoic acid (PFHpA)[N11]	0.001	ug/L	< 0.001	-	-	-
Perfluorohexanoic acid (PFHxA)[N11]	0.001	ug/L	< 0.001	-	-	-
Perfluorononanoic acid (PFNA)[N11]	0.001	ug/L	< 0.001	-	-	-
Perfluorooctanoic acid (PFOA)[N11]	0.001	ug/L	< 0.001	-	-	-
Perfluoropentanoic acid (PFPeA)[N11]	0.001	ug/L	< 0.001	-	-	-
Perfluorotetradecanoic acid (PFTeDA)[N11]	0.001	ug/L	< 0.001	-	-	-
Perfluorotridecanoic acid (PFTrDA)[N15]	0.001	ug/L	< 0.001	-	-	-
Perfluoroundecanoic acid (PFUnDA)[N11]	0.001	ug/L	< 0.001	-	-	-
13C4-PFBA (surr.)	1	%	95	-	-	-
13C5-PFPeA (surr.)	1	%	103	-	-	-
13C5-PFHxA (surr.)	1	%	96	-	-	-
13C4-PFHpA (surr.)	1	%	129	-	-	-
13C8-PFOA (surr.)	1	%	104	-	-	-
13C5-PFNA (surr.)	1	%	93	-	-	-
13C6-PFDA (surr.)	1	%	113	-	-	-
13C2-PFUnDA (surr.)	1	%	99	-	-	-
13C2-PFDoDA (surr.)	1	%	94	-	-	-
13C2-PFTeDA (surr.)	1	%	64	-	-	-
Perfluoroalkyl sulfonic acids (PFSAs)- Ultra Trace						
Perfluorobutanesulfonic acid (PFBS)[N11]	0.001	ug/L	< 0.001	-	-	-
Perfluorononanesulfonic acid (PFNS)[N15]	0.001	ug/L	< 0.001	-	-	-
Perfluoropropanesulfonic acid (PFPrS)[N15]	0.001	ug/L	< 0.001	-	-	-
Perfluoropentanesulfonic acid (PFPeS)[N15]	0.001	ug/L	< 0.001	-	-	-

Client Sample ID			0021_QC208_250403	0021_QC209_250404	0021_QC234_250401	0021_QC236_250402
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S25-Ap0044107	S25-Ap0044108	S25-Ap0044111	S25-Ap0044113
Date Sampled			Apr 03, 2025	Apr 04, 2025	Apr 01, 2025	Apr 02, 2025
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonic acids (PFSAs)- Ultra Trace						
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.001	ug/L	< 0.001	-	-	-
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.001	ug/L	< 0.001	-	-	-
Perfluorooctanesulfonic acid (PFOS)[N11]	0.0001	ug/L	0.0006	-	-	-
Perfluorodecanesulfonic acid (PFDS)[N15]	0.001	ug/L	< 0.001	-	-	-
13C3-PFBS (surr.)	1	%	122	-	-	-
18O2-PFHxS (surr.)	1	%	109	-	-	-
13C8-PFOS (surr.)	1	%	86	-	-	-
Perfluoroalkyl sulfonamido substances- Ultra Trace						
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)[N11]	0.005	ug/L	< 0.005	-	-	-
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)[N11]	0.005	ug/L	< 0.005	-	-	-
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	0.005	ug/L	< 0.005	-	-	-
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	0.005	ug/L	< 0.005	-	-	-
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	0.005	ug/L	< 0.005	-	-	-
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	0.005	ug/L	< 0.005	-	-	-
Perfluorooctane sulfonamide (FOSA)[N11]	0.005	ug/L	< 0.005	-	-	-
13C8-FOSA (surr.)	1	%	96	-	-	-
D3-N-MeFOSA (surr.)	1	%	101	-	-	-
D5-N-EtFOSA (surr.)	1	%	69	-	-	-
D7-N-MeFOSE (surr.)	1	%	79	-	-	-
D9-N-EtFOSE (surr.)	1	%	72	-	-	-
D5-N-EtFOSAA (surr.)	1	%	126	-	-	-
D3-N-MeFOSAA (surr.)	1	%	100	-	-	-
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)- Ultra Trace						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.001	ug/L	< 0.001	-	-	-
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)[N11]	0.005	ug/L	< 0.005	-	-	-
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	0.001	ug/L	< 0.001	-	-	-
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	0.001	ug/L	< 0.001	-	-	-
13C2-4:2 FTSA (surr.)	1	%	167	-	-	-
13C2-6:2 FTSA (surr.)	1	%	124	-	-	-
13C2-8:2 FTSA (surr.)	1	%	112	-	-	-
13C2-10:2 FTSA (surr.)	1	%	88	-	-	-
PFASs Summations						
Sum (PFHxS + PFOS)*	0.001	ug/L	< 0.001	-	-	-
Sum of US EPA PFAS (PFOS + PFOA)*	0.001	ug/L	< 0.001	-	-	-
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.001	ug/L	< 0.001	-	-	-
Sum of WA DWER PFAS (n=10)*	0.005	ug/L	< 0.005	-	-	-
Sum of PFASs (n=30)*	0.005	ug/L	< 0.005	-	-	-

Client Sample ID			0021_QC240_250404	0021_QC254_250402	0021_QC255_250403	0021_QC256_250403
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S25-Ap0044115	S25-Ap0044117	S25-Ap0044118	S25-Ap0044119
Date Sampled			Apr 04, 2025	Apr 02, 2025	Apr 03, 2025	Apr 03, 2025
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	0.10	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	0.17	< 0.01	< 0.01	0.04
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	0.87	< 0.01	< 0.01	0.30
Perfluoroheptanoic acid (PFHpA)[N11]	0.01	ug/L	0.15	< 0.01	< 0.01	0.04
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	0.57	< 0.01	< 0.01	0.09
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	%	113	122	124	127
13C5-PFPeA (surr.)	1	%	122	129	144	122
13C5-PFHxA (surr.)	1	%	122	124	138	127
13C4-PFHpA (surr.)	1	%	124	155	143	121
13C8-PFOA (surr.)	1	%	118	118	119	121
13C5-PFNA (surr.)	1	%	118	122	122	117
13C6-PFDA (surr.)	1	%	86	146	112	86
13C2-PFUnDA (surr.)	1	%	99	137	89	78
13C2-PFDoDA (surr.)	1	%	116	131	78	73
13C2-PFTeDA (surr.)	1	%	186	161	65	56
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	%	114	134	107	93
D3-N-MeFOSA (surr.)	1	%	85	121	53	25
D5-N-EtFOSA (surr.)	1	%	57	92	39	17
D7-N-MeFOSE (surr.)	1	%	88	107	70	54
D9-N-EtFOSE (surr.)	1	%	85	120	68	43
D5-N-EtFOSAA (surr.)	1	%	144	197	94	122
D3-N-MeFOSAA (surr.)	1	%	114	139	107	73
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS)[N11]	0.01	ug/L	0.42	< 0.01	< 0.01	< 0.2
Perfluorononanesulfonic acid (PFNS)[N15]	0.01	ug/L	0.02	< 0.01	< 0.01	0.27
Perfluoropropanesulfonic acid (PFPrS)[N15]	0.01	ug/L	0.16	< 0.01	< 0.01	0.02
Perfluoropentanesulfonic acid (PFPeS)[N15]	0.01	ug/L	0.61	< 0.01	< 0.01	0.13
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.01	ug/L	7.6	< 0.01	< 0.01	4.2
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.01	ug/L	0.92	< 0.01	< 0.01	0.24
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	18	< 0.01	< 0.01	21
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01

Client Sample ID			0021_QC240_250404	0021_QC254_250402	0021_QC255_250403	0021_QC256_250403
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S25-Ap0044115	S25-Ap0044117	S25-Ap0044118	S25-Ap0044119
Date Sampled			Apr 04, 2025	Apr 02, 2025	Apr 03, 2025	Apr 03, 2025
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonic acids (PFSAs)						
13C3-PFBS (surr.)	1	%	130	184	148	INT
18O2-PFHxS (surr.)	1	%	88	130	123	101
13C8-PFOS (surr.)	1	%	82	132	124	66
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 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	%	127	161	151	INT
13C2-6:2 FTSA (surr.)	1	%	124	147	120	133
13C2-8:2 FTSA (surr.)	1	%	91	124	106	86
13C2-10:2 FTSA (surr.)	1	%	111	177	89	75
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	25.6	< 0.01	< 0.01	25.2
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	18.57	< 0.01	< 0.01	21.09
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	26.17	< 0.01	< 0.01	25.29
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	27.88	< 0.05	< 0.05	25.67
Sum of PFASs (n=30)*	0.1	ug/L	29.59	< 0.1	< 0.1	26.33

Client Sample ID			0021_QC257_250407
Sample Matrix			Water
Eurofins Sample No.			S25-Ap0044120
Date Sampled			Apr 07, 2025
Test/Reference	LOR	Unit	
Perfluoroalkyl carboxylic acids (PFCAs)			
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01
Perfluoroheptanoic acid (PFHpA)[N11]	0.01	ug/L	< 0.01
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01
Perfluorodecanoic acid (PFDA)[N11]	0.01	ug/L	< 0.01
Perfluoroundecanoic acid (PFUnDA)[N11]	0.01	ug/L	< 0.01
Perfluorododecanoic acid (PFDoDA)[N11]	0.01	ug/L	< 0.01
Perfluorotridecanoic acid (PFTrDA)[N15]	0.01	ug/L	< 0.01
Perfluorotetradecanoic acid (PFTeDA)[N11]	0.01	ug/L	< 0.01
13C4-PFBA (surr.)	1	%	107
13C5-PFPeA (surr.)	1	%	111
13C5-PFHxA (surr.)	1	%	133
13C4-PFHpA (surr.)	1	%	149
13C8-PFOA (surr.)	1	%	105
13C5-PFNA (surr.)	1	%	125
13C6-PFDA (surr.)	1	%	126

Client Sample ID			0021_QC257_250407
Sample Matrix			Water
Eurofins Sample No.			S25-Ap0044120
Date Sampled			Apr 07, 2025
Test/Reference	LOR	Unit	
Perfluoroalkyl carboxylic acids (PFCAs)			
13C2-PFUnDA (surr.)	1	%	119
13C2-PFDoDA (surr.)	1	%	111
13C2-PFTeDA (surr.)	1	%	100
Perfluoroalkyl sulfonamido substances			
Perfluorooctane sulfonamide (FOSA)[N11]	0.05	ug/L	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	0.05	ug/L	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	0.05	ug/L	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)[N11]	0.05	ug/L	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)[N11]	0.05	ug/L	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	0.05	ug/L	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	0.05	ug/L	< 0.05
13C8-FOSA (surr.)	1	%	116
D3-N-MeFOSA (surr.)	1	%	93
D5-N-EtFOSA (surr.)	1	%	80
D7-N-MeFOSE (surr.)	1	%	103
D9-N-EtFOSE (surr.)	1	%	101
D5-N-EtFOSAA (surr.)	1	%	122
D3-N-MeFOSAA (surr.)	1	%	111
Perfluoroalkyl sulfonic acids (PFSAs)			
Perfluorobutanesulfonic acid (PFBS)[N11]	0.01	ug/L	< 0.01
Perfluorononanesulfonic acid (PFNS)[N15]	0.01	ug/L	< 0.01
Perfluoropropanesulfonic acid (PFPrS)[N15]	0.01	ug/L	< 0.01
Perfluoropentanesulfonic acid (PFPeS)[N15]	0.01	ug/L	< 0.01
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.01	ug/L	0.05
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.01	ug/L	< 0.01
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	0.06
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01
13C3-PFBS (surr.)	1	%	181
18O2-PFHxS (surr.)	1	%	108
13C8-PFOS (surr.)	1	%	130
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)[N11]	0.05	ug/L	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	0.01	ug/L	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	0.01	ug/L	< 0.01
13C2-4:2 FTSA (surr.)	1	%	151
13C2-6:2 FTSA (surr.)	1	%	129
13C2-8:2 FTSA (surr.)	1	%	102
13C2-10:2 FTSA (surr.)	1	%	113

Client Sample ID			0021_QC257_250407
Sample Matrix			**Water**
Eurofins Sample No.			**S25-Ap0044120**
Date Sampled			**Apr 07, 2025**
Test/Reference	LOR	Unit	
PFASs Summations			
Sum (PFHxS + PFOS)*	0.01	ug/L	0.11
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	0.06
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	0.11
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	0.11
Sum of PFASs (n=30)*	0.1	ug/L	0.11

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	Apr 16, 2025	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Sydney	Apr 16, 2025	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Sydney	Apr 16, 2025	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Sydney	Apr 16, 2025	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl carboxylic acids (PFCAs) - Ultra Trace	Sydney	Apr 16, 2025	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS) - ultra trace			
Perfluoroalkyl sulfonic acids (PFSAs)- Ultra Trace	Sydney	Apr 16, 2025	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS) - ultra trace			
Perfluoroalkyl sulfonamido substances- Ultra Trace	Sydney	Apr 16, 2025	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS) Ultra trace			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)- Ultra Trace	Sydney	Apr 16, 2025	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS) - ultra trace			
PFASs Summations	Sydney	Apr 15, 2025	
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS) - ultra trace			

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

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

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

Eurofins ARL Pty Ltd
ABN: 91 05 0159 898

Perth
46-48 Banksia Road
Welshpool
WA 6106
+61 8 6253 4444
NATA# 2377
Site# 2370 & 2554

Eurofins Environment Testing NZ Ltd
NZBN: 9429046024954

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

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

Project Name: ACT_0021_PFASOMP_25
Project ID: 12626622

Order No.:
Report #: 1210052
Phone: 02 9239 7100
Fax: 02 9239 7199

Received: Apr 14, 2025 1:18 PM
Due: Apr 23, 2025
Priority: 5 Day
Contact Name: Helen Milne

Eurofins Analytical Services Manager : Adam Bateup

Sample Detail						Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	Per- and Polyfluoroalkyl Substances (PFASs) - Ultra Trace
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X
External Laboratory								
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**			
1	0021_QC202_250331	Mar 31, 2025		Water	S25-Ap0044102		X	
2	0021_QC203_250401	Apr 01, 2025		Water	S25-Ap0044103		X	
3	0021_QC204_250401	Apr 01, 2025		Soil	S25-Ap0044104	X	X	
4	0021_QC205_250401	Apr 01, 2025		Water	S25-Ap0044105		X	
5	0021_QC206_250402	Apr 02, 2025		Water	S25-Ap0044106		X	
6	0021_QC208_250403	Apr 03, 2025		Water	S25-Ap0044107			X
7	0021_QC209_250404	Apr 04, 2025		Water	S25-Ap0044108		X	
8	0021_QC210_250404	Apr 04, 2025		Soil	S25-Ap0044109	X	X	
9	0021_QC211_	Apr 04, 2025		Soil	S25-Ap0044110	X	X	

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

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

Melbourne	Geelong	Sydney	Canberra	Brisbane	Newcastle
6 Monterey Road	19/8 Lewalan Street	179 Magowar Road	Unit 1,2 Dacre Street	1/21 Smallwood Place	1/2 Frost Drive
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+61 3 8564 5000	+61 3 8564 5000	+61 2 9900 8400	+61 2 6113 8091	+61 7 3902 4600	+61 2 4968 8448
NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261
Site# 1254	Site# 25403	Site# 18217	Site# 25466	Site# 20794 & 2780	Site# 25079

Eurofins ARL Pty Ltd
ABN: 91 05 0159 898

Perth
46-48 Banksia Road
Welshpool
WA 6106
+61 8 6253 4444
NATA# 2377
Site# 2370 & 2554

Eurofins Environment Testing NZ Ltd
NZBN: 9429046024954

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35 O'Rorke Road	Unit C1/4 Pacific Rise	43 Detroit Drive	1277 Cameron Road
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IANZ# 1327	IANZ# 1308	IANZ# 1290	IANZ# 1402

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

Project Name: ACT_0021_PFASOMP_25
Project ID: 12626622

Order No.:
Report #: 1210052
Phone: 02 9239 7100
Fax: 02 9239 7199

Received: Apr 14, 2025 1:18 PM
Due: Apr 23, 2025
Priority: 5 Day
Contact Name: Helen Milne

Eurofins Analytical Services Manager : Adam Bateup

Sample Detail						Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	Per- and Polyfluoroalkyl Substances (PFASs) - Ultra Trace
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X
	250404							
10	0021_QC234_250401	Apr 01, 2025		Water	S25-Ap0044111		X	
11	0021_QC235_250402	Apr 02, 2025		Soil	S25-Ap0044112	X	X	
12	0021_QC236_250402	Apr 02, 2025		Water	S25-Ap0044113		X	
13	0021_QC239_250403	Apr 03, 2025		Soil	S25-Ap0044114	X	X	
14	0021_QC240_250404	Apr 04, 2025		Water	S25-Ap0044115		X	
15	0021_QC241_250404	Apr 04, 2025		Soil	S25-Ap0044116	X	X	
16	0021_QC254_250402	Apr 02, 2025		Water	S25-Ap0044117		X	
17	0021_QC255_250403	Apr 03, 2025		Water	S25-Ap0044118		X	
18	0021_QC256_250403	Apr 03, 2025		Water	S25-Ap0044119		X	
19	0021_QC257_	Apr 07, 2025		Water	S25-Ap0044120		X	

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

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

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6 Monterey Road	19/8 Lewalan Street	179 Magowar Road	Unit 1,2 Dacre Street	1/21 Smallwood Place	1/2 Frost Drive
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VIC 3175	VIC 3216	NSW 2145	ACT 2911	QLD 4172	NSW 2304
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NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261	NATA# 1261
Site# 1254	Site# 25403	Site# 18217	Site# 25466	Site# 20794 & 2780	Site# 25079

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ABN: 91 05 0159 898

Perth
46-48 Banksia Road
Welshpool
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IANZ# 1327	IANZ# 1308	IANZ# 1290	IANZ# 1402

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

Project Name: ACT_0021_PFASOMP_25
Project ID: 12626622

Order No.:
Report #: 1210052
Phone: 02 9239 7100
Fax: 02 9239 7199

Received: Apr 14, 2025 1:18 PM
Due: Apr 23, 2025
Priority: 5 Day
Contact Name: Helen Milne

Eurofins Analytical Services Manager : Adam Bateup

Sample Detail						Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	Per- and Polyfluoroalkyl Substances (PFASs) - Ultra Trace
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X
19	0021_QC257_250407	Apr 07, 2025		Water	S25-Ap0044120			
Test Counts						6	18	1

Internal Quality Control Review and Glossary

General

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

Holding Times

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

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours before sample receipt deadlines as stated on the SRA.

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

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

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

Units

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

Terms

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

QC - Acceptance Criteria

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

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

Results <10 times the LOR:	No Limit
Results between 10-20 times the LOR:	RPD must lie between 0-50%
Results >20 times the LOR:	RPD must lie between 0-30%

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

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

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

QC Data General Comments

1. Where a result is reported as less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown are not data from your samples.
3. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time.Analysis will begin as soon as possible after sample receipt.
4. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery, the term "INT" appears against that analyte.
5. For Matrix Spikes and LCS results, a dash "-" in the report means that the specific analyte was not added to the QC sample.
6. Duplicate RPDs are calculated from raw analytical data; thus, it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	ug/L	< 0.05			0.05	Pass	
Perfluoropentanoic acid (PFPeA)	ug/L	< 0.01			0.01	Pass	
Perfluorohexanoic acid (PFHxA)	ug/L	< 0.01			0.01	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/L	< 0.01			0.01	Pass	
Perfluorooctanoic acid (PFOA)	ug/L	< 0.01			0.01	Pass	
Perfluorononanoic acid (PFNA)	ug/L	< 0.01			0.01	Pass	
Perfluorodecanoic acid (PFDA)	ug/L	< 0.01			0.01	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/L	< 0.01			0.01	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/L	< 0.01			0.01	Pass	
Perfluorotridecanoic acid (PFTrDA)	ug/L	< 0.01			0.01	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/L	< 0.01			0.01	Pass	
Method Blank							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	ug/L	< 0.05			0.05	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/L	< 0.05			0.05	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/L	< 0.05			0.05	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	ug/L	< 0.05			0.05	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	ug/L	< 0.05			0.05	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/L	< 0.05			0.05	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/L	< 0.05			0.05	Pass	
Method Blank							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	ug/L	< 0.01			0.01	Pass	
Perfluorononanesulfonic acid (PFNS)	ug/L	< 0.01			0.01	Pass	
Perfluoropropanesulfonic acid (PFPrS)	ug/L	< 0.01			0.01	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/L	< 0.01			0.01	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/L	< 0.01			0.01	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/L	< 0.01			0.01	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/L	< 0.01			0.01	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/L	< 0.01			0.01	Pass	
Method Blank							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/L	< 0.01			0.01	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	ug/L	< 0.05			0.05	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/L	< 0.01			0.01	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/L	< 0.01			0.01	Pass	
Method Blank							
Perfluoroalkyl carboxylic acids (PFCAs) - Ultra Trace							
Perfluorobutanoic acid (PFBA)	ug/L	< 0.005			0.005	Pass	
Perfluorodecanoic acid (PFDA)	ug/L	< 0.001			0.001	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/L	< 0.001			0.001	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/L	< 0.001			0.001	Pass	
Perfluorohexanoic acid (PFHxA)	ug/L	< 0.001			0.001	Pass	
Perfluorononanoic acid (PFNA)	ug/L	< 0.001			0.001	Pass	
Perfluorooctanoic acid (PFOA)	ug/L	< 0.001			0.001	Pass	
Perfluoropentanoic acid (PFPeA)	ug/L	< 0.001			0.001	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/L	< 0.001			0.001	Pass	
Perfluorotridecanoic acid (PFTrDA)	ug/L	< 0.001			0.001	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/L	< 0.001			0.001	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Perfluoroalkyl sulfonic acids (PFSAs)- Ultra Trace							
Perfluorobutanesulfonic acid (PFBS)	ug/L	< 0.001			0.001	Pass	
Perfluorononanesulfonic acid (PFNS)	ug/L	< 0.001			0.001	Pass	
Perfluoropropanesulfonic acid (PFPrS)	ug/L	< 0.001			0.001	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/L	< 0.001			0.001	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/L	< 0.001			0.001	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/L	< 0.001			0.001	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/L	< 0.0001			0.0001	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/L	< 0.001			0.001	Pass	
Method Blank							
Perfluoroalkyl sulfonamido substances- Ultra Trace							
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	ug/L	< 0.005			0.005	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	ug/L	< 0.005			0.005	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/L	< 0.005			0.005	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/L	< 0.005			0.005	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/L	< 0.005			0.005	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/L	< 0.005			0.005	Pass	
Perfluorooctane sulfonamide (FOSA)	ug/L	< 0.005			0.005	Pass	
Method Blank							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)- Ultra Trace							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/L	< 0.001			0.001	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	ug/L	< 0.005			0.005	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/L	< 0.001			0.001	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/L	< 0.001			0.001	Pass	
Method Blank							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	ug/L	< 0.05			0.05	Pass	
Perfluoropentanoic acid (PFPeA)	ug/L	< 0.01			0.01	Pass	
Perfluorohexanoic acid (PFHxA)	ug/L	< 0.01			0.01	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/L	< 0.01			0.01	Pass	
Perfluorooctanoic acid (PFOA)	ug/L	< 0.01			0.01	Pass	
Perfluorononanoic acid (PFNA)	ug/L	< 0.01			0.01	Pass	
Perfluorodecanoic acid (PFDA)	ug/L	< 0.01			0.01	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/L	< 0.01			0.01	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/L	< 0.01			0.01	Pass	
Perfluorotridecanoic acid (PFTrDA)	ug/L	< 0.01			0.01	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/L	< 0.01			0.01	Pass	
Method Blank							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	ug/L	< 0.05			0.05	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/L	< 0.05			0.05	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/L	< 0.05			0.05	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	ug/L	< 0.05			0.05	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	ug/L	< 0.05			0.05	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/L	< 0.05			0.05	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/L	< 0.05			0.05	Pass	
Method Blank							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	ug/L	< 0.01			0.01	Pass	
Perfluorononanesulfonic acid (PFNS)	ug/L	< 0.01			0.01	Pass	
Perfluoropropanesulfonic acid (PFPrS)	ug/L	< 0.01			0.01	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/L	< 0.01			0.01	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Perfluorohexanesulfonic acid (PFHxS)	ug/L	< 0.01			0.01	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/L	< 0.01			0.01	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/L	< 0.01			0.01	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/L	< 0.01			0.01	Pass	
Method Blank							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/L	< 0.01			0.01	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	ug/L	< 0.05			0.05	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/L	< 0.01			0.01	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/L	< 0.01			0.01	Pass	
LCS - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	%	88			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	111			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	108			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	132			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	105			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	88			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	91			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	104			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	107			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	96			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	92			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	%	95			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	67			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	95			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	%	93			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	%	94			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	93			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	101			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	113			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	%	86			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	%	96			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	99			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	92			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	%	87			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	89			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	88			50-150	Pass	
LCS - % Recovery							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	128			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	%	97			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	111			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	103			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs) - Ultra Trace							
Perfluorobutanoic acid (PFBA)	%	106			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	106			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	106			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	109			50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Perfluorohexanoic acid (PFHxA)	%	83			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	86			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	77			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	90			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	90			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	99			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)- Ultra Trace							
Perfluorobutanesulfonic acid (PFBS)	%	83			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	%	86			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	%	74			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	93			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	93			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	%	90			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	90			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	74			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances- Ultra Trace							
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	%	93			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	%	93			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	96			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	102			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	86			50-150	Pass	
Perfluorooctane sulfonamide (FOSA)	%	90			50-150	Pass	
LCS - % Recovery							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)- Ultra Trace							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	99			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	106			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	99			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	%	88			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	111			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	108			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	132			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	105			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	88			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	91			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	104			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	107			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	96			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	92			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	%	95			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	67			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	95			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	%	93			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	%	94			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	93			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	101			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Perfluorobutanesulfonic acid (PFBS)	%	113			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	%	86			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	%	96			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	99			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	92			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	%	87			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	89			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	88			50-150	Pass	
LCS - % Recovery							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	128			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	%	97			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	111			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	103			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)	N25-Ap0036660	NCP	%	85			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	N25-Ap0036660	NCP	%	104			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	N25-Ap0036660	NCP	%	96			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	N25-Ap0036660	NCP	%	89			50-150	Pass	
Perfluorooctanoic acid (PFOA)	N25-Ap0036660	NCP	%	78			50-150	Pass	
Perfluorononanoic acid (PFNA)	N25-Ap0036660	NCP	%	105			50-150	Pass	
Perfluorodecanoic acid (PFDA)	N25-Ap0036660	NCP	%	104			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	N25-Ap0036660	NCP	%	108			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	N25-Ap0036660	NCP	%	103			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	N25-Ap0036660	NCP	%	78			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	N25-Ap0036660	NCP	%	91			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonamido substances				Result 1					
Perfluorooctane sulfonamide (FOSA)	N25-Ap0036660	NCP	%	80			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	N25-Ap0036660	NCP	%	70			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	N25-Ap0036660	NCP	%	103			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	N25-Ap0036660	NCP	%	94			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	N25-Ap0036660	NCP	%	92			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	N25-Ap0036660	NCP	%	93			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	N25-Ap0036660	NCP	%	115			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1					
Perfluorobutanesulfonic acid (PFBS)	N25-Ap0036660	NCP	%	107			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	N25-Ap0036660	NCP	%	82			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	N25-Ap0036660	NCP	%	64			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Perfluoropentanesulfonic acid (PFPeS)	N25-Ap0036660	NCP	%	71			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	N25-Ap0036660	NCP	%	94			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	N25-Ap0036660	NCP	%	87			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	N25-Ap0036660	NCP	%	87			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	N25-Ap0036660	NCP	%	85			50-150	Pass	
Spike - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	N25-Ap0036660	NCP	%	109			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	N25-Ap0036660	NCP	%	84			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	N25-Ap0036660	NCP	%	120			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	N25-Ap0036660	NCP	%	90			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-Ap0047670	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	S25-Ap0047670	NCP	ug/L	0.02	0.02	4.0	30%	Pass	
Perfluorohexanoic acid (PFHxA)	S25-Ap0047670	NCP	ug/L	0.03	0.03	8.0	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	S25-Ap0047670	NCP	ug/L	< 0.01	0.01	8.0	30%	Pass	
Perfluorooctanoic acid (PFOA)	S25-Ap0047670	NCP	ug/L	0.02	0.01	20	30%	Pass	
Perfluorononanoic acid (PFNA)	S25-Ap0047670	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	S25-Ap0047670	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	S25-Ap0047670	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	S25-Ap0047670	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	S25-Ap0047670	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	S25-Ap0047670	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	S25-Ap0047670	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	S25-Ap0047670	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	S25-Ap0047670	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol(N-MeFOSE)	S25-Ap0047670	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol(N-EtFOSE)	S25-Ap0047670	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	S25-Ap0047670	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	S25-Ap0047670	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	

Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	S25-Ap0047670	NCP	ug/L	0.01	< 0.01	14	30%	Pass	
Perfluorononanesulfonic acid (PFNS)	S25-Ap0047670	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)	S25-Ap0047670	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	S25-Ap0047670	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	S25-Ap0047670	NCP	ug/L	0.15	0.17	11	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	S25-Ap0047670	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	S25-Ap0047670	NCP	ug/L	0.59	0.62	5.0	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	S25-Ap0047670	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1	Result 2	RPD			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	S25-Ap0047670	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid(6:2 FTSA)	S25-Ap0047670	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	S25-Ap0047670	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	S25-Ap0047670	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	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
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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Appendix F

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:**	2.295 m bTOC	**Time SWL Measured:**	08:08 AM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	5.480 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	5.2 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	HMAS Creswell	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Gatic
Sampler:	ES	**Flow Cell Used?**	Yes	**Screened Interval From:**	UN to 6.00 m bTOC		
Date:	07/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	NA m bTOC		
Round:	April 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: 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*	
08:15	0.5	22.5	5.90	361.9	1.96	56.0	2.510	Initially grey, moderate turbidity, no odour or sheen.
08:18	1.0	22.4	5.87	333.4	2.24	53.2	2.525	Initial SWL drop but now appears stable.
08:21	1.5	22.5	5.84	315.2	2.03	50.1	2.530	
08:24	2.0	22.5	5.83	304.5	2.20	47.8	2.530	
08:27	2.5	22.5	5.80	286.3	2.24	45.9	2.530	Pale grey, moderate turbidity, no odour or sheen. Good recharge.
08:30	3.0	22.4	5.80	284.1	2.10	45.0	2.530	
08:33	3.5	22.4	5.80	284.2	2.05	43.1	2.530	Pale grey, moderate turbidity, no odour or sheen. Good recharge.
								Parameters stable, samples collected.

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: Well difficult to open as gatic bolt rusted in, gatic full of dirt, old well cap and one side of casing is cracked. Casing is dirty on inside

Sample Summary

Samples collected? Yes — If duplicate collected, put ID *(e.g. QC101, QC201)*: — Dup 1 Name:

Lab QC collected? N — Dup 2 Name:

Purging and Sampling Record

Well ID: 0020_MW007

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	2.010 m bTOC	**Time SWL Measured:**	08:09 AM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	3.180 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	3 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	HMAS Creswell	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Gatic
Sampler:	AK	**Flow Cell Used?**	Yes	**Screened Interval From:**	0.70 to 3.70 m bTOC		
Date:	07/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	NA m bTOC		
Round:	April 2025 OMP	**Field Filtered?**	No	**Historical ID (if applicable):**	MW10, 0020_MW10, MW010		

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*	
08:30	0.5	23.9	6.93	712.0	1.40	166.7	2.070	cloudy, no odour or sheen
08:32	1.0	24.0	7.03	700.0	0.54	128.9	2.050	great recharge
08:34	1.5	24.0	7.04	692.0	0.07	92.4	2.040	
08:36	2.0	24.0	7.07	688.0	0.01	69.6	2.050	
08:38	2.5	24.0	7.08	690.0	0.01	55.6	2.050	recharge stable
08:40	3.0	24.0	7.08	689.0	0.00	47.6	2.050	clear, no odour or sheen, no sediment
08:42	3.5	24.0	7.09	688.0	0.02	34.9	2.050	
08:44	4.0	24.0	7.09	687.0	0.02	27.2	2.050	
08:46	4.5	24.0	7.10	687.0	0.02	19.6	2.050	
08:48	5.0	24.0	7.09	687.0	0.02	16.0	2.050	
08:50	5.5	24.0	7.11	687.0	0.01	13.6	2.050	
08:52	6.0	24.0	7.11	686.0	0.01	10.5	2.050	
08:54	6.5	24.0	7.11	686.0	0.01	9.3	2.050	Clear, no odour or sheen, no sediment.
								parameters stable, recharge stable, samples taken

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 ID *(e.g. QC101, QC201)*: — Dup 1 Name:

Lab QC collected? Y — Dup 2 Name:

Purging and Sampling Record

Well ID: 0020_MW012

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	2.455 m bTOC	**Time SWL Measured:**	04:00 PM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	6.250 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	HMAS Creswell / AEC G	**WQuality Meter Type:**	YSI	**NAPL Depth:**	- m bTOC	**Gatic or Stick Up?**	Stick Up
Sampler:	ES	**Flow Cell Used?**	Yes	**Screened Interval From:**	3.85 to 6.85 m bTOC		
Date:	02/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	2.55 m bTOC		
Round:	April 2025 OMP	**Field Filtered?**	No	**Historical ID (if applicable):**	MW12, MW012A		

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*	
16:02	0.5	18.4	5.05	212.5	0.75	-69.0	2.455	Clear, no odour or sheen, good recharge.
16:05	1.0	18.3	5.09	215.9	0.38	-79.8	2.455	
16:08	1.5	18.3	5.10	218.0	0.30	-83.9	2.455	
16:11	2.0	18.3	5.10	218.7	0.28	-86.7	2.455	Pale yellow, clear, slight hydrogen sulphide odour, no sheen, good recharge.
16:14	2.5	18.2	5.11	221.6	0.21	-91.6	2.455	
16:17	3.0	18.2	5.11	221.0	0.16	-94.5	2.455	Pale yellow, clear, slight hydrogen sulphide odour, no sheen, good recharge.
16:20	3.5	18.2	5.12	222.0	0.16	-98.2	2.455	
16:23	4.0	18.2	5.12	221.4	0.12	-100.0	2.455	Pale yellow, clear, slight hydrogen sulphide odour, no sheen, good recharge.
16:26	4.5	18.2	5.12	221.1	0.12	-100.7	2.455	
16:29	5.0	18.2	5.12	221.6	0.12	-101.9	2.455	Pale yellow, clear, slight hydrogen sulphide odour, no sheen, good recharge.
								Parameters stable, samples collected.
								Resampled on Tues 08.04.2025 as samples not found during sample sorting.
8:00	-	17.4	4.99	195.0	1.71	-31.9	2.560	Pale yellow, clear, slight hydrogen sulphide odour, no sheen.
								Sampled with bailer, SWL and parameters checked to roughly match above

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

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0020_MW017

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	0.909 m bTOC	**Time SWL Measured:**	09:01 AM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	4.901 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	4 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	HMAS Creswell	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Stick Up
Sampler:	AD	**Flow Cell Used?**	Yes	**Screened Interval From:**	2.93 to 5.93 m bTOC		
Date:	31/03/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	1.48 m bTOC		
Round:	April 2025 OMP	**Field Filtered?**	No	**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: 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*	
09:12	0.5	20.0	5.07	225.3	0.56	-26.0	0.961	Bright-yellow tinge, clear, moderate rotten egg odour, no sheen, no sediment
09:14	1.0	20.1	5.11	202.5	0.48	-46.7	0.961	Good recharge
09:16	1.5	20.1	5.12	199.4	0.30	-60.3	0.963	
09:18	2.0	20.1	5.14	199.0	0.23	-69.8	0.964	
09:20	2.5	20.0	5.14	199.3	0.19	-78.2	0.961	
09:22	3.0	20.0	5.14	198.5	0.17	-86.6	0.961	
09:24	3.5	19.9	5.14	198.4	0.14	-92.8	0.961	
09:26	4.0	20.0	5.13	199.5	0.12	-96.6	0.957	
09:28	4.5	20.0	5.13	199.3	0.10	-100.4	0.958	
09:30	5.0	20.0	5.13	199.5	0.10	-103.9	0.950	
09:33	6.0	20.0	5.12	199.6	0.08	-109.6	0.962	Flow rate increased
09:36	7.0	19.9	5.12	198.8	0.07	-113.9	0.959	
09:39	8.0	20.0	5.12	199.1	0.07	-119.4	0.923	Bright-yellow tinge, clear, slight rotten egg odour, no sheen, no sediment
								Parameters stable, 1 well volume purged, samples collected

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

Lab QC collected? Y

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0020_MW037

Job Information		Sampling Information		Monitoring Well Information				
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	4.590 m bTOC	**Time SWL Measured:**	11:16 AM	
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	6.950 m bTOC	**Logic Check:**	Yes	
Proj. No.:	12626622	**Sample Depth:**	6.5 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes	
Site:	HMAS Creswell / AEC F	**WQuality Meter Type:**	YSI	**NAPL Depth:**	- m bTOC	**Gatic or Stick Up?**	Gatic	
Sampler:	ES	**Flow Cell Used?**	Yes	**Screened Interval From:**	3.95 to 6.95 m bTOC			
Date:	31/03/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	4.38 m bTOC			
Round:	April 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*	
11:27	0.5	18.4	3.89	342.9	1.78	253.8	4.780	Pale brown, slightly cloudy, no odour or sheen, poor recharge.
11:30	1.0	18.6	3.89	343.5	1.48	269.8	4.785	SWL dropping on lowest speed
11:33	1.5	18.6	3.88	341.6	1.34	277.6	4.925	
11:36	2.0	18.5	3.88	338.0	1.32	272.4	4.960	
11:39	2.5	18.4	3.89	332.4	1.33	285.8	5.010	Pale brown, slightly cloudy, no odour or sheen, ok recharge.
11:42	3.0	18.4	3.90	330.3	1.29	289.4	5.040	
11:45	3.5	18.2	3.90	327.2	1.30	291.2	5.070	
11:48	4.0	18.3	3.90	325.9	1.30	291.1	5.100	Pale brown, slightly cloudy, no odour or sheen, ok recharge.
								Parameters stable, samples collected

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

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*: QC131, QC231

Dup 1 Name: 0020_QC131_250331

Dup 2 Name: 0020_QC231_250331

Purging and Sampling Record

Well ID: 0020_MW052

Job Information		*Sampling Information*		*Monitoring Well Information*				
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	0.035 m bTOC	**Time SWL Measured:**	01:09 PM	
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	1.814 m bTOC	**Logic Check:**	Yes	
Proj. No.:	12626622	**Sample Depth:**	1.5 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes	
Site:	HMAS Creswell / AEC F	**WQuality Meter Type:**	YSI	**NAPL Depth:**	- m bTOC	**Gatic or Stick Up?**	Gatic	
Sampler:	AD	**Flow Cell Used?**	Yes	**Screened Interval From:**	0.63 to 2.13 m bTOC			
Date:	31/03/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	DRY			
Round:	April 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*	
13:20	0.6	20.8	5.78	116.7	6.06	90.3	0.131	Pale yellow tinge, mostly cloudy, no odour, no sheen, no sediment
13:23	1.0	20.8	5.80	115.1	6.04	90.6	0.139	
13:27	1.5	20.9	5.78	114.8	5.99	92.4	0.148	Good recharge
13:31	2.0	21.0	5.77	114.4	5.96	94.2	0.152	
13:34	2.5	21.0	5.76	114.7	6.00	96.0	0.158	
13:38	3.0	21.0	5.75	115.2	6.00	98.4	0.163	
13:41	3.5	20.9	5.72	115.1	6.00	100.7	0.125	Pale yellow tinge, mostly cloudy, no odour, no sheen, no sediment
								Parameters stable, 1 well volume purged, samples collected

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

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0020_MW055

Job Information		*Sampling Information*		*Monitoring Well Information*				
Client:	Department of Defence	**Purge Method:**		**SWL:**	DRY m bTOC	**Time SWL Measured:**	02:38 PM	
Project:	JBRF / Creswell OMP	**Sample Method:**		**Well Depth:**	3.600 m bTOC	**Logic Check:**	Yes	
Proj. No.:	12626622	**Sample Depth:**	m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes	
Site:	HMAS Creswell	**WQuality Meter Type:**		**NAPL Depth:**	- m bTOC	**Gatic or Stick Up?**	Stick Up	
Sampler:	ES/AK	**Flow Cell Used?**		**Screened Interval From:**	1.54 to 3.54 m bTOC			
Date:	07/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	DRY			
Round:	April 2025 OMP	**Field Filtered?**		**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*	
								Not sampled, dry

Field QA Checks:		*Purge Volumes*			
Air bubbles in vials or violent reactions?		**Casing Int. Dia (mm)**	**50**	**100**	**150**
Decontamination as per GHD procedure?		**Vol (L/m of casing)**	**2.0**	**7.9**	**17.7**
Was sampling equipment pre-cleaned?					
COC updated?					

Comment: Found with metal detector, hidden under grass

Sample Summary

Samples collected? No — If duplicate collected, put ID *(e.g. QC101, QC201)*: — Dup 1 Name:

Lab QC collected? N — Dup 2 Name:

Purging and Sampling Record

Well ID: 0020_MW056

Job Information		*Sampling Information*		*Monitoring Well Information*				
Client:	Department of Defence	**Purge Method:**		**SWL:**	DRY m bTOC	**Time SWL Measured:**	02:57 PM	
Project:	JBRF / Creswell OMP	**Sample Method:**		**Well Depth:**	4.465 m bTOC	**Logic Check:**	Yes	
Proj. No.:	12626622	**Sample Depth:**	m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes	
Site:	HMAS Creswell	**WQuality Meter Type:**		**NAPL Depth:**	- m bTOC	**Gatic or Stick Up?**	Stick Up	
Sampler:	ES	**Flow Cell Used?**		**Screened Interval From:**	2.01 to 5.01 m bTOC			
Date:	31/03/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	3.88 m bTOC			
Round:	April 2025 OMP	**Field Filtered?**		**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*	
								Not sampled, dry

Field QA Checks:		*Purge Volumes*			
Air bubbles in vials or violent reactions?		**Casing Int. Dia (mm)**	**50**	**100**	**150**
Decontamination as per GHD procedure?		**Vol (L/m of casing)**	**2.0**	**7.9**	**17.7**
Was sampling equipment pre-cleaned?					
COC updated?					

Comment:

Sample Summary

Samples collected? No

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0020_MW057

Job Information		Sampling Information		Monitoring Well Information				
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	3.070 m bTOC	**Time SWL Measured:**	03:05 PM	
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	4.575 m bTOC	**Logic Check:**	Yes	
Proj. No.:	12626622	**Sample Depth:**	4.2 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes	
Site:	HMAS Creswell / AEC G	**WQuality Meter Type:**	YSI	**NAPL Depth:**	- m bTOC	**Gatic or Stick Up?**	Stick Up	
Sampler:	ES	**Flow Cell Used?**	Yes	**Screened Interval From:**	1.74 to 4.74 m bTOC			
Date:	31/03/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	2.85 m bTOC			
Round:	April 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*	
15:15	0.5	19.2	5.59	235.4	6.39	191.2	3.070	Pale brown, clear, no odour or sheen. Good recharge, stable SWL
15:18	1.0	19.2	5.60	235.3	6.13	191.5	3.070	Confirmed DO is in mg/L not %, emptied flow cell
15:21	1.5	19.2	5.58	234.4	6.39	194.0	3.070	
15:24	2.0	19.2	5.58	234.1	5.67	193.5	3.070	Pale brown, mostly clear, no odour or sheen. Good recharge, stable SWL
15:27	2.5	19.2	5.58	234.3	5.59	193.1	3.070	
15:30	3.0	19.3	5.58	234.6	5.53	193.3	3.070	Pale brown, mostly clear, no odour or sheen. Good recharge, stable SWL
								Parameters stable, samples collected.

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

Lab QC collected? Y

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0020_MW058

Job Information		Sampling Information		Monitoring Well Information				
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	4.240 m bTOC	**Time SWL Measured:**	07:49 AM	
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	5.878 m bTOC	**Logic Check:**	Yes	
Proj. No.:	12626622	**Sample Depth:**	5.5 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes	
Site:	HMAS Creswell / AEC G	**WQuality Meter Type:**	YSI	**NAPL Depth:**	- m bTOC	**Gatic or Stick Up?**	Stick Up	
Sampler:	ES	**Flow Cell Used?**	Yes	**Screened Interval From:**	2.90 to 5.90 m bTOC			
Date:	03/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	4.53 m bTOC			
Round:	April 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*	
07:59	0.5	18.2	4.78	184.8	3.69	191.7	4.280	Pale brown, slight brown sediment load, mostly clear, no odour or sheen.
08:02	1.0	18.2	4.79	182.7	3.42	191.1	4.280	
08:05	1.5	18.2	4.81	186.7	3.27	186.7	4.280	Pale brown, clear, no odour or sheen. Good recharge.
08:08	2.0	18.2	4.80	186.2	2.68	180.9	4.280	
08:11	2.5	18.4	4.81	188.1	2.26	177.3	4.280	Pale brown, clear, no odour or sheen. Good recharge.
08:14	3.0	18.4	4.81	189.9	2.03	175.3	4.280	
08:17	3.5	18.4	4.81	191.2	1.91	173.0	4.280	Clear, no odour or sheen. Good recharge.
08:20	4.0	18.4	4.82	192.5	1.60	169.1	4.280	
08:23	4.5	18.4	4.82	192.0	1.54	165.6	4.280	Clear, no odour or sheen. Good recharge.
08:26	5.0	18.4	4.82	194.1	1.50	162.0	4.280	Clear, no odour or sheen. Good recharge.
								Parameters stable, samples collected.

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 ID *(e.g. QC101, QC201)*: QC137, QC237

Lab QC collected? Y

Dup 1 Name: 0020_QC137_250403

Dup 2 Name: 0020_QC237_250403

Purging and Sampling Record

Well ID: 0020_MW059

Job Information		*Sampling Information*		*Monitoring Well Information*				
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	1.905 m bTOC	**Time SWL Measured:**	04:02 PM	
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	3.790 m bTOC	**Logic Check:**	Yes	
Proj. No.:	12626622	**Sample Depth:**	3.4 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes	
Site:	HMAS Creswell / AEC G	**WQuality Meter Type:**	YSI	**NAPL Depth:**	- m bTOC	**Gatic or Stick Up?**	Stick Up	
Sampler:	ES	**Flow Cell Used?**	Yes	**Screened Interval From:**	1.98 to 3.98 m bTOC			
Date:	31/03/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	3.52 m bTOC			
Round:	April 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*	
16:10	0.5	19.2	4.69	280.7	4.88	226.8	2.020	Pale brown, mostly clear, no odour or sheen, SWL dropping
16:14	1.0	19.5	4.70	282.6	4.70	241.2	2.070	
16:17	1.5	19.6	4.70	282.6	5.09	252.1	2.105	Pale brown, mostly clear, no odour or sheen, ok recharge.
16:20	2.0	19.6	4.68	268.3	5.22	261.3	2.150	
16:23	2.5	19.8	4.67	256.3	5.51	263.1	2.170	Pale brown, mostly clear, no odour or sheen, ok recharge.
16:26	3.0	19.8	4.64	249.1	5.29	265.5	2.190	
16:29	3.5	19.8	4.62	249.3	5.38	266.7	2.210	Pale brown, mostly clear, no odour or sheen, ok recharge.
								Parameters stable, samples collected.

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

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0020_MW068

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	6.217 m bTOC	**Time SWL Measured:**	09:45 AM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	8.346 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	7.3 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	HMAS Creswell	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Stick Up
Sampler:	AD/AK	**Flow Cell Used?**	Yes	**Screened Interval From:**	5.24 to 8.24 m bTOC		
Date:	01/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	4.81 m bTOC		
Round:	April 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*	
09:55	0.5	18.9	5.37	428.4	3.63	10.3	6.623	Pale yellow tinge, clear, no odour, no sheen, no sediment
09:57	1.0	18.9	5.34	416.9	3.17	23.6	6.709	Flow rate reduced
09:59	1.5	18.9	5.32	411.4	2.91	35.1	6.745	
10:02	2.0	19.0	5.32	405.3	3.54	42.4	6.770	Clear, no odour, no sheen, no sediment
10:04	2.5	19.0	5.31	407.7	3.63	49.6	6.790	
10:06	3.0	18.9	5.28	416.7	2.81	54.4	7.825	
10:08	3.5	18.9	5.27	420.0	2.57	56.9	7.835	
10:10	4.0	18.8	5.26	420.5	2.28	59.7	7.865	
10:12	4.5	18.9	5.25	419.7	2.21	61.3	7.875	
10:14	5.0	18.9	5.25	419.7	2.20	63.1	7.890	Clear, no odour, no sheen, no sediment
								Parameters stable, >1 well volume purged, samples collected

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

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0020_MW069

Job Information		*Sampling Information*		*Monitoring Well Information*			
Client:	Department of Defence	**Purge Method:**	Bailer	**SWL:**	7.090 m bTOC	**Time SWL Measured:**	
Project:	JBRF / Creswell OMP	**Sample Method:**	Bailer	**Well Depth:**	11.750 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	9.36 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	HMAS Creswell	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Gatic
Sampler:	JM/SF	**Flow Cell Used?**	Yes	**Screened Interval From:**	UN to UN m bTOC		
Date:	24/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	NA m bTOC		
Round:	April 2025 OMP	**Field Filtered?**	No	**Historical ID (if applicable):**	0		

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*	
10:30	3.0	20.7	5.73	217.4	3.00	36.4	7.360	Pale brown, turbid, trace suspended solids, no odour, no sheen
10:31	6.0	20.9	5.89	213.6	1.85	21.9	8.340	
10:34	10.0	20.7	6.06	219.7	2.00	3.0	9.320	Orange brown colour
10:37	13.0	20.8	6.16	226.7	1.52	-9.5	9.340	Pink orange colour
10:00	16.0	20.8	6.21	231.5	1.73	-24.5	9.360	Pink orange colour, turbid, trace suspended solids, no odour, no sheen
								Samples collected

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: Peri-pump battery failed, bailer used instead

Sample Summary

Samples collected? Yes — If duplicate collected, put ID *(e.g. QC101, QC201)*: — Dup 1 Name:

Lab QC collected? N — Dup 2 Name:

Purging and Sampling Record

Well ID: 0020_MW070

Job Information		Sampling Information		Monitoring Well Information				
Client:	Department of Defence	**Purge Method:**	Bailer	**SWL:**	1.130 m bTOC	**Time SWL Measured:**		
Project:	JBRF / Creswell OMP	**Sample Method:**	Bailer	**Well Depth:**	2.260 m bTOC	**Logic Check:**	Yes	
Proj. No.:	12626622	**Sample Depth:**	1.26 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes	
Site:	HMAS Creswell / AEC E	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Gatic	
Sampler:	JM/SF	**Flow Cell Used?**	Yes	**Screened Interval From:**	UN to UN m bTOC			
Date:	24/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	NA m bTOC			
Round:	April 2025 OMP	**Field Filtered?**	No	**Historical ID (if applicable):**	0			

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*	
11:05	1.0	20.8	5.43	88.7	2.83	76.7	1.130	Clear, non-turbid, no sediment, no odour, no sheen
11:07	3.0	20.7	5.43	96.7	2.34	123.6	1.160	
11:10	5.0	20.6	5.32	104.8	2.17	137.8	1.240	Dark brown colour, suspended solids/silt, no odour, no sheen
11:12	7.0	20.5	5.30	101.9	2.55	149.0	1.260	Dark brown colour, suspended solids/silt, no odour, no sheen
								Samples collected

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: Peri-pump battery failed, bailer used instead

Sample Summary

Samples collected? Yes

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*: QC120

Dup 1 Name: 0020_QC120_250424

Dup 2 Name:

Purging and Sampling Record

Well ID: 0020_MW071

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Bailer	**SWL:**	4.750 m bTOC	**Time SWL Measured:**	
Project:	JBRF / Creswell OMP	**Sample Method:**	Bailer	**Well Depth:**	11.850 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	6.61 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	HMAS Creswell / Captains Lagoc	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Gatic
Sampler:	JM/SF	**Flow Cell Used?**	Yes	**Screened Interval From:**	UN to UN m bTOC		
Date:	24/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	NA m bTOC		
Round:	April 2025 OMP	**Field Filtered?**	No	**Historical ID (if applicable):**	0		

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*	
09:55	3.5	21.8	6.08	296.4	1.94	-30.0	4.750	Pale brown, turbid, slight decaying organic odour, no sheen, no sediment
10:00	8.0	20.9	5.28	387.8	2.10	33.7	5.410	
10:05	12.0	20.6	5.74	339.7	1.85	30.7	6.130	
10:10	16.0	20.5	5.91	355.9	2.50	22.4	6.580	
10:14	20.0	20.5	6.11	302.9	1.66	30.0	6.610	Pale brown, turbid, slight decaying organic odour, no sheen, no sediment
								Samples collected

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: Peri-pump battery failed, bailer used instead

Sample Summary

Samples collected? Yes — If duplicate collected, put ID *(e.g. QC101, QC201)*: — Dup 1 Name:

Lab QC collected? N — Dup 2 Name:

Purging and Sampling Record

Well ID: 0020_MW102D

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	2.303 m bTOC	**Time SWL Measured:**	02:47 PM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	9.598 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	8.6 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	HMAS Creswell / Captains Lagoc	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	
Sampler:	AD	**Flow Cell Used?**	Yes	**Screened Interval From:**	3.78 to 9.78 m bTOC		
Date:	31/03/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	2.785 m bTOC		
Round:	April 2025 OMP	**Field Filtered?**	No	**Historical ID (if applicable):**	CL_MW02, 0020_MW102		

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*	
14:59	0.5	19.0	5.70	369.3	0.59	40.2	2.579	Orange-brown tinge, cloudy, slight rotten egg odour, no sheen, no sediment
15:02	1.0	19.0	5.67	368.2	0.36	24.8	2.732	Pale yellow tinge, clear, slight rotten egg odour, no sheen, no sediment
15:05	1.5	19.1	5.69	368.5	0.27	15.3	2.843	Pump flow rate reduced
15:09	2.0	19.2	5.71	372.6	0.22	4.3	2.937	Pump flow rate reduced again
15:13	2.5	19.2	5.82	387.6	0.18	5.5	3.038	
15:18	3.0	19.2	5.74	373.5	0.23	-13.3	3.124	Pump on lowest setting, poor to moderate recharge
15:23	3.5	19.2	5.69	364.1	0.16	-18.9	3.197	Clear, slight rotten egg odour, no sheen, no sediment
15:28	4.0	19.2	5.69	363.6	0.14	-22.2	3.312	
15:33	4.5	19.2	5.67	362.6	0.14	-25.6	3.394	Clear, slight rotten egg odour, no sheen, no sediment
								Parameters stable, poor to moderate recharge, samples collected

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

Lab QC collected? Y

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0020_MW102S

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	0.930 m bTOC	**Time SWL Measured:**	02:48 PM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	2.820 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	2.8 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	HMAS Creswell / Captains Lagoc	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Stick Up
Sampler:	AK	**Flow Cell Used?**	Yes	**Screened Interval From:**	1.89 to 2.89 m bTOC		
Date:	31/03/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	2.525 m bTOC		
Round:	April 2025 OMP	**Field Filtered?**	No	**Historical ID (if applicable):**	CL_MW02A, 0020_MW102A		

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*	
15:05	0.5	20.2	6.68	357.1	1.66	25.3	0.980	yellow tinge, no odour or sheen
15:08	1.0	20.2	5.85	364.2	1.47	27.9	0.990	
15:11	1.5	20.3	5.84	369.0	1.42	29.3	0.990	
15:14	2.0	20.3	5.77	386.9	1.44	33.2	0.990	yellow tinge, no odour or sheen
15:18	2.5	20.3	5.75	387.6	1.53	33.6	0.990	
15:21	3.0	20.3	5.75	389.5	1.64	33.6	0.980	
15:24	3.5	20.3	5.76	388.7	1.50	35.0	0.990	Yellow tinge, no odour or sheen.
								parameters stable, recharge stable, samples taken

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

Lab QC collected? Y

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0020_MW104

Job Information		Sampling Information		Monitoring Well Information				
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	5.020 m bTOC	**Time SWL Measured:**	08:50 AM	
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	10.190 m bTOC	**Logic Check:**	Yes	
Proj. No.:	12626622	**Sample Depth:**	9 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes	
Site:	HMAS Creswell / Captains Lagoc	**WQuality Meter Type:**	YSI	**NAPL Depth:**	- m bTOC	**Gatic or Stick Up?**	Stick Up	
Sampler:	ES	**Flow Cell Used?**	Yes	**Screened Interval From:**	4.56 to 10.56 m bTOC			
Date:	03/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	4.96 m bTOC			
Round:	April 2025 OMP	**Field Filtered?**	No	**Historical ID (if applicable):**	CL_MW04			

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*	
09:04	0.5	17.5	4.07	276.5	2.48	334.1	5.290	White, cloudy, no odour or sheen, poor recharge. Turned down speed
09:09	1.0	17.5	4.10	272.1	1.91	3609.0	5.375	Reduced speed again
09:14	1.5	17.4	4.10	271.0	1.65	376.3	5.400	
09:19	2.0	17.4	4.10	271.5	1.53	334.8	5.400	Clear, no odour or sheen. Poor recharge.
09:24	2.5	17.4	4.10	271.8	1.56	383.1	5.400	
09:29	3.0	17.4	4.10	272.8	1.40	383.3	5.400	Clear, no odour or sheen. Poor recharge.
09:34	3.5	17.4	4.10	272.8	1.52	378.1	5.400	
09:39	4.0	17.7	4.10	272.0	1.34	370.5	5.400	Clear, no odour or sheen. Poor recharge.
09:44	4.5	17.8	4.11	271.9	1.28	365.1	5.430	
09:49	5.0	17.9	4.10	271.7	1.23	362.5	5.440	Clear, no odour or sheen. Poor recharge.
								Parameters stable, samples collected.

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 ID *(e.g. QC101, QC201)*: QC138, QC238 — Dup 1 Name: 0020_QC138_250403

Lab QC collected? Y — Dup 2 Name: 0020_QC238_250403

Purging and Sampling Record

Well ID: 0020_MW109

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	1.030 m bTOC	**Time SWL Measured:**	08:58 AM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	2.745 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	2.5 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	HMAS Creswell / AEC E	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Stick Up
Sampler:	AK	**Flow Cell Used?**	Yes	**Screened Interval From:**	1.84 to 2.84 m bTOC		
Date:	31/03/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	1.55 m bTOC		
Round:	April 2025 OMP	**Field Filtered?**	No	**Historical ID (if applicable):**	E_MW04		

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*	
09:17	0.5	20.6	4.86	303.4	1.19	-126.9	1.100	cloudy yellow, opaque, egg odour, no sheen
09:20	1.0	20.6	4.85	295.7	0.70	-137.2	1.105	cloudy white, opaque, egg odour, no sheen, slowed pump
09:23	1.5	20.5	4.85	293.2	0.82	-142.2	1.095	as above, good recharge
09:26	2.0	20.6	4.86	287.0	0.88	-143.3	1.090	
09:29	2.5	20.6	4.85	293.1	0.60	-146.8	1.095	as above, recharge stable
09:32	3.0	20.6	4.85	295.6	0.34	-151.9	1.105	
09:35	3.5	20.6	4.86	296.2	0.33	-152.7	0.105	as above, recharge stable
08:38	4.0	20.6	4.86	295.6	0.31	-153.0	1.105	Cloudy yellow white, opaque, egg odour, no sheen
								parameters stable, recharge stable, samples taken

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 ID *(e.g. QC101, QC201)*: — Dup 1 Name:

Lab QC collected? Y — Dup 2 Name:

Purging and Sampling Record

Well ID: 0020_MW110

Job Information		*Sampling Information*		*Monitoring Well Information*			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	1.010 m bTOC	**Time SWL Measured:**	01:06 PM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	3.030 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	1.5 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	HMAS Creswell / AEC E	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Stick Up
Sampler:	AK	**Flow Cell Used?**	Yes	**Screened Interval From:**	1.89 to 2.89 m bTOC		
Date:	31/03/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	1.35 m bTOC		
Round:	April 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: 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*	
13:24	0.5	20.3	5.86	385.1	2.56	27.1	1.110	cloudy yellow, opaque, slight egg odour
13:28	1.0	20.4	5.83	385.7	1.79	5.6	1.140	as above
13:31	1.5	20.4	5.81	388.1	1.29	-16.9	1.140	cloudy yellow, slightly clear, slight egg odour
13:34	2.0	20.2	5.63	369.1	0.77	-121.3	1.140	stable recharge
13:37	2.5	20.2	5.62	367.0	0.68	-131.7	1.145	
13:40	3.0	20.2	5.65	367.7	0.66	-136.7		IP battery died, replaced
13:43	3.5	20.2	5.67	368.3	0.69	-135.9	1.140	Cloudy, yellow orange, opaque, slight egg odour
								parameters stable, recharge stable, samples taken

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

Lab QC collected?

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0020_MW111

Job Information		*Sampling Information*		*Monitoring Well Information*			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	1.165 m bTOC	**Time SWL Measured:**	07:53 AM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	2.665 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	2.5 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	HMAS Creswell / AEC F	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Gatic
Sampler:	AK	**Flow Cell Used?**	Yes	**Screened Interval From:**	1.03 to 3.03 m bTOC		
Date:	03/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	2.47 m bTOC		
Round:	April 2025 OMP	**Field Filtered?**	No	**Historical ID (if applicable):**	F_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*	
08:08	0.5	19.9	5.03	170.3	2.17	34.8	1.350	grey, opaque, trace fine dark suspended sediment, slight h2s egg odour, no she
08:13	1.0	21.1	5.03	175.4	1.79	17.8	1.480	
08:16	1.5	21.1	5.03	178.5	1.82	10.5	1.595	slowed pump, no odour
08:19	2.0	21.0	4.99	175.9	1.36	-12.4	1.720	
08:22	2.5	21.0	5.00	175.5	1.36	-13.3	1.760	cloudy, no odour or sheen, no sediment, slowed pump
08:25	3.0	21.0	5.14	158.5	2.00	-11.4	1.840	
08:30	3.5	20.9	5.21	185.3	2.31	-2.5	1.960	slightly cloudy, slowed pump
08:35	4.0	20.7	5.19	183.3	2.45	7.0	2.070	slowed pump to slowest setting
08:40	4.5	20.7	5.16	181.1	2.37	13.9	2.140	
08:45	5.0	20.5	5.15	179.0	2.35	22.3	2.220	Slightly cloudy, no odour or sheen, no sediment
								parameters mostly stable, swl droping, samples taken

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 ID *(e.g. QC101, QC201)*: — Dup 1 Name:

Lab QC collected? Y — Dup 2 Name:

Purging and Sampling Record

Well ID: 0020_MW112

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	1.050 m bTOC	**Time SWL Measured:**	09:08 AM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	3.860 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	3.5 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	HMAS Creswell / AEC F	**WQuality Meter Type:**	YSI	**NAPL Depth:**	- m bTOC	**Gatic or Stick Up?**	Gatic
Sampler:	ES	**Flow Cell Used?**	Yes	**Screened Interval From:**	0.99 to 3.99 m bTOC		
Date:	31/03/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	2.77 m bTOC		
Round:	April 2025 OMP	**Field Filtered?**	No	**Historical ID (if applicable):**	F_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*	
09:21	0.5	20.0	5.49	206.0	3.95	162.8	1.130	Pale brown, slight brown sediment load, no odour or sheen
09:24	1.0	20.0	5.60	202.0	3.26	161.1	1.160	Moderate recharge.
09:27	1.5	20.1	5.63	202.2	3.22	165.9	1.210	Same as above
09:30	2.0	20.1	5.62	202.4	3.32	174.3	1.230	
09:33	2.5	20.1	5.63	202.8	3.43	180.6	1.255	Pale brown, slight brown sediment load, no odour or sheen
09:36	3.0	20.2	5.56	217.2	3.12	190.3	1.280	
09:39	3.5	20.1	5.46	238.9	2.95	197.7	1.300	
09:42	4.0	20.1	5.46	249.5	3.02	206.0	1.320	Pale brown, slight brown sediment load, no odour or sheen
09:45	4.5	20.1	5.46	247.2	3.26	209.8	1.340	
09:48	5.0	20.2	5.43	250.3	3.24	215.8	1.360	
09:51	5.5	20.2	5.42	248.3	3.23	212.3	1.380	Pale yellow, mostly clear slight brown sediment load, no odour or sheen
								Parameters stable, samples collected.

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 ID *(e.g. QC101, QC201)*: QC130, QC230

Lab QC collected? Y

Dup 1 Name: 0020_QC130_250331

Dup 2 Name: 0020_QC230_250331

Purging and Sampling Record

Well ID: 0020_MW115

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	0.180 m bTOC	**Time SWL Measured:**	10:36 AM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	3.740 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	3.5 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	HMAS Creswell / AEC F	**WQuality Meter Type:**	YSI	**NAPL Depth:**	- m bTOC	**Gatic or Stick Up?**	Gatic
Sampler:	ES	**Flow Cell Used?**	Yes	**Screened Interval From:**	1.61 to 4.61 m bTOC		
Date:	31/03/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	4.165 m bTOC		
Round:	April 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*	
10:48	0.5	18.2	6.33	316.8	0.51	39.9	0.420	Pale brown, clear, no odour or sheen. Dropping SWL on low speed
10:51	1.0	18.2	6.35	315.7	0.25	44.1	0.430	
10:54	1.5	18.2	6.35	314.2	0.24	44.1	0.430	Pale brown, clear, no odour or sheen, good recharge. Stable SWL
10:57	2.0	18.2	6.37	313.8	0.17	43.4	0.430	
11:01	2.5	18.2	6.36	311.3	0.16	42.4	0.430	
11:04	3.0	18.2	6.36	310.1	0.16	43.5	0.430	Pale brown, clear, no odour or sheen, good recharge. Stable SWL
								Parameters stable, samples collected

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: Initial blockage in well around 2.3 m bTOC, pushed IP down to depth to get to 3.74

Sample Summary

Samples collected? Yes — If duplicate collected, put ID *(e.g. QC101, QC201)*: — Dup 1 Name:

Lab QC collected? N — Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW018

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	2.071 m bTOC	**Time SWL Measured:**	12:34 PM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	8.819 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	7.8 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF / Captains Lagoon	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Stick Up
Sampler:	AD	**Flow Cell Used?**	Yes	**Screened Interval From:**	5.83 to 8.83 m bTOC		
Date:	02/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	2.69 m bTOC		
Round:	April 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*	
12:40	0.5	20.0	4.17	283.9	0.43	90.9	2.189	Pale orange tinge, clear, no odour, no sheen, slight orange sediment
12:43	1.0	19.9	4.17	283.0	0.28	95.1	2.207	
12:46	1.5	20.0	4.16	283.2	0.23	98.9	2.223	
12:48	2.0	20.0	4.16	283.1	0.20	101.1	2.224	Great recharge
12:52	3.0	19.9	4.16	282.6	0.18	104.9	2.247	
13:56	4.0	19.8	4.16	281.9	0.16	109.1	2.266	
13:00	5.0	19.8	4.16	281.6	0.17	113.4	2.270	Clear, no odour, no sheen, no sediment
13:04	6.0	19.8	4.17	281.5	0.17	116.8	2.287	
13:08	7.0	19.9	4.18	282.0	0.16	117.7	2.283	Clear, no odour, no sheen, no sediment, great recharge
								Parameters stable, samples collected

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

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW020

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	1.920 m bTOC	**Time SWL Measured:**	07:53 AM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	8.677 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	7.7 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Stick Up
Sampler:	AD	**Flow Cell Used?**	Yes	**Screened Interval From:**	5.69 to 8.69 m bTOC		
Date:	02/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	2.84 m bTOC		
Round:	April 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*	
08:06	0.5	17.9	5.18	394.9	3.34	205.5	2.285	Pale brown tinge, slightly clear, no odour, no sheen, slight dark browm sediment
08:09	1.0	18.0	5.20	392.6	3.17	207.5	2.436	No sediment, pump flow rate slowed
08:12	1.5	18.0	5.22	391.9	3.18	208.9	2.536	Colourless, mostly clear, no odour, no sheen, no sediment, pump flow rate slowe
08:15	2.0	18.2	5.23	402.4	3.06	207.8	2.586	
08:18	2.5	18.2	5.22	413.6	1.86	209.7	2.643	Clear, no odour, no sheen, no sediment
08:21	3.0	18.2	5.24	411.1	2.14	206.8	2.691	
08:24	3.5	18.1	5.23	407.2	2.57	205.6	2.729	
08:28	4.0	18.1	5.24	413.4	2.61	204.6	2.766	Moderate to good recharge
08:31	4.5	18.2	5.25	422.0	2.54	201.5	2.796	
08:34	5.0	18.2	5.25	426.0	2.44	199.0	2.807	Clear, no odour, no sheen, no sediment, moderate to good recharge
								Parameters stable, samples collected

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: Monument lid no longer sits and closes properly on monument

Sample Summary

Samples collected? Yes

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW021

Job Information		*Sampling Information*		*Monitoring Well Information*			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	3.651 m bTOC	**Time SWL Measured:**	04:02 PM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	8.794 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Gatic
Sampler:	AD	**Flow Cell Used?**	Yes	**Screened Interval From:**	5.86 to 8.86 m bTOC		
Date:	01/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	2.29 m bTOC		
Round:	April 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*	
16:09	0.5	20.0	4.24	938.0	0.70	175.9	3.686	Pale orange tinge, clear, no odour, no sheen, slight orange sediment
16:13	1.5	19.7	4.23	930.0	2.39	194.5	3.698	Great recharge
16:16	2.5	19.6	4.24	925.0	2.39	200.0	3.698	Clear, no odour, no sheen, slight orange-red sediment
16:19	3.5	19.6	4.24	924.0	2.23	202.0	3.704	Clear, no odour, no sheen, no sediment
16:21	4.5	19.7	4.24	921.0	2.21	202.4	3.706	Flow rate increased
16:23	5.5	19.6	4.24	918.0	2.04	202.3	3.708	Clear, no odour, no sheen, no sediment
								Parameters stable, samples collected

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

Lab QC collected? Y

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW022

Job Information		*Sampling Information*		*Monitoring Well Information*			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	2.020 m bTOC	**Time SWL Measured:**	12:33 PM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	7.461 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	6.45 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Gatic
Sampler:	AD	**Flow Cell Used?**	Yes	**Screened Interval From:**	4.66 to 7.66 m bTOC		
Date:	01/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	2.885 m bTOC		
Round:	April 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*	
12:45	0.5	21.4	4.27	230.0	0.38	224.2	2.247	Pale yellow-orange tinge, slightly clear, no odour, no sheen, no sediment
12:47	1.0	21.2	4.24	227.8	0.30	227.1	2.326	
12:49	1.5	21.2	4.23	227.1	0.22	229.9	2.391	Pale yellow tinge, mostly clear
12:51	2.0	21.2	4.24	225.6	0.16	231.6	2.474	
12:53	2.5	21.1	4.25	225.2	0.15	232.6	2.516	
12:55	3.0	21.0	4.25	225.4	0.12	233.6	2.551	
12:57	3.5	21.0	4.26	225.3	0.10	234.1	2.566	Good recharge
12:59	4.0	21.0	4.26	224.7	0.10	234.7	2.594	
13:01	4.5	21.0	4.26	225.1	0.10	235.2	2.619	Pale yellow tinge, mostly clear, no odour, no sheen, no sediment, good recharge
								Parameters stable, samples collected

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

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW024

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	2.442 m bTOC	**Time SWL Measured:**	03:14 PM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	9.851 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	8.85 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Gatic
Sampler:	AD	**Flow Cell Used?**	Yes	**Screened Interval From:**	6.71 to 9.71 m bTOC		
Date:	01/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	2.58 m bTOC		
Round:	April 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*	
11:37	0.5	19.9	3.97	486.1	0.55	203.5	2.865	Pale yellow tinge, slightly clear, no odour, no sheen, no sediment
11:39	1.0	20.1	3.98	487.5	0.62	208.7	3.033	Pump flow rate reduced
11:43	1.5	20.3	3.99	490.6	0.66	211.1	3.246	Colourless
11:46	2.0	20.4	3.99	492.0	0.41	213.2	3.424	Pump flow rate reduced to lowest seting
11:50	2.5	20.5	3.99	493.6	0.24	214.6	3.571	
11:54	3.0	20.4	3.99	493.9	0.24	218.6	3.704	Poor to moderate recharge, colourless, slightly cloudy
11:58	3.5	20.4	3.99	492.8	0.17	222.5	3.846	
12:03	4.0	20.5	3.99	493.3	0.15	225.2	3.959	Colourless, very slightly cloudy, no odour, no sheen, no sediment
12:07	4.5	20.6	3.99	493.4	0.15	227.7	4.083	
12:12	5.0	20.5	4.01	491.4	0.14	229.5	4.212	Colourless, very slightly cloudy, no odour, no sheen, no sediment
								Parameters stable, samples collected

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: Monument lid no longer sits and closes properly on monument

Sample Summary

Samples collected? Yes

Lab QC collected? Y

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW025

Job Information		Sampling Information		Monitoring Well Information					
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	2.350 m bTOC	**Time SWL Measured:**	10:30 AM		
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	5.780 m bTOC	**Logic Check:**	Yes		
Proj. No.:	12626622	**Sample Depth:**	3.5 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes		
Site:	JBRF	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Stick Up		
Sampler:	JM/AK	**Flow Cell Used?**	Yes	**Screened Interval From:**	2.84 to 5.84 m bTOC		0.755		
Date:	02/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	2.84 m bTOC				
Round:	April 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*	
10:38	0.5	21.4	4.44	195.7	2.92	3.2	2.360	clear, dark orange fine suspended sediment, h2s egg odour, no sheen, slowed p
10:41	1.0	21.3	4.50	206.0	2.39	-20.7	2.360	stable recharge
10:44	1.5	21.3	4.53	196.4	1.83	-33.9	2.360	
10:45	2.0	21.4	4.54	197.6	1.72	-38.7	2.365	
10:48	2.5	21.4	4.57	188.7	1.67	-43.1	2.360	no sediment
10:51	3.0	21.5	4.59	177.0	1.56	-50.5	2.360	
10:54	3.5	21.4	4.59	183.7	1.43	-55.3	2.360	
10:57	4.0	21.5	4.61	164.2	1.37	-57.4	2.360	clear, no sediment, h2s egg odour, no sheen, recharge stable
11:00	4.5	21.5	4.63	161.7	1.31	-61.3	2.360	
11:03	5.0	21.5	4.64	159.7	1.29	-62.4	2.360	Clear, no sediment, hydrogen sulfide odour, no sheen, recharge stable
								recharge stable, parameters stable, samples taken

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

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW026

Job Information		*Sampling Information*		*Monitoring Well Information*			
Client:	Department of Defence	**Purge Method:**	Purge	**SWL:**	2.515 m bTOC	**Time SWL Measured:**	09:50 AM
Project:	JBRF / Creswell OMP	**Sample Method:**	Bailer	**Well Depth:**	8.610 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	8.29 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Stick Up
Sampler:	JM/AD	**Flow Cell Used?**	Yes	**Screened Interval From:**	5.75 to 8.75 m bTOC		
Date:	07/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	2.86 m bTOC		
Round:	April 2025 OMP	**Field Filtered?**	No	**Historical ID (if applicable):**	MW10		

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*	
09:57	6.0	21.1	4.92	874.0	1.40	156.2	5.000	Yellow-brown, mostly clear, no odour, no sheen, no sediment
10:02	10.0	19.8	4.92	890.0	1.42	138.4	6.355	
10:05	14.0	18.5	4.92	880.0	1.06	123.7	7.550	Brown, cloudy, no odour, no sheen, high sediment load, dark brown
10:08	17.0	18.8	4.96	656.0	3.39	111.7	8.070	Slight decaying organic odour
10:11	19.0	18.7	5.12	870.0	3.58	100.4	8.270	
10:14	20.0	18.7	5.12	864.0	4.12	91.5	8.136	Slight foam on water surface within bailer
10:18	22.0	18.7	5.04	860.0	4.21	77.0	8.365	
10:22	24.0	18.6	5.41	861.0	4.08	66.0	8.290	
10:25	26.0	18.7	5.32	857.0	4.20	57.3	8.290	Brown, cloudy, slight decaying organic odour, no sheen, high sediment load, dar
								high sediment load, dark brown, slight foam on water surface within bailer
								Parameters generally stable, samples collected

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: Bailer used as location unable to drive to, accessed on foot.

Sample Summary

Samples collected? Yes — If duplicate collected, put ID *(e.g. QC101, QC201)*: — Dup 1 Name:

Lab QC collected? N — Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW028

Job Information		Sampling Information		Monitoring Well Information				
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	1.070 m bTOC	**Time SWL Measured:**	11:34 AM	
Project:	JBRF / Creswell OMP	**Sample Method:**	Micropurge	**Well Depth:**	6.920 m bTOC	**Logic Check:**	Yes	
Proj. No.:	12626622	**Sample Depth:**	4.5 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes	
Site:	JBRF	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Stick Up	
Sampler:	JNM	**Flow Cell Used?**	Yes	**Screened Interval From:**	3.79 to 6.79 m bTOC		0.6	
Date:	02/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	1.47 m bTOC			
Round:	April 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: 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*	
13:50	1.0	21.8	6.34	1270.0	5.72	232.8	1.120	Clear, non-turbid, trace fine organic matter, no odour, no sheen.
13:55	2.0	21.5	6.45	1280.0	4.82	215.3	1.620	same as above
14:01	3.0	21.5	6.48	1292.0	4.55	208.5	1.930	same as above
14:06	4.0	21.4	6.45	1304.0	4.47	204.1	1.940	same as above
14:12	5.0	21.4	6.44	1306.0	4.42	205.6	1.960	Clear, non-turbid, trace fine organic matter, no odour, no sheen.
								Parameters stable, samples collected.

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: Monument lid no longer sits and closes properly on monument

Sample Summary

Samples collected? Yes

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW030

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	0.972 m bTOC	**Time SWL Measured:**	
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	10.684 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	9.6 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Stick Up
Sampler:	AD	**Flow Cell Used?**	Yes	**Screened Interval From:**	7.62 to 10.62 m bTOC		
Date:	03/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	1.73 m bTOC		
Round:	April 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: 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*	
09:06	0.5	18.0	6.43	1893.0	0.80	38.2	1.314	Orange-yellow tinge, slightly clear, no odour, no sheen, no sediment
09:08	1.0	18.0	6.45	1893.0	0.39	15.2	1.503	Pale yellow tinge, mostly clear, no odour, no sheen, no sediment
09:10	1.5	18.1	6.46	1894.0	0.25	-2.5	1.683	Pump flow rate slowed
09:12	2.0	18.1	6.47	1892.0	0.21	-14.6	1.862	Pale yellow tinge, clear, no odour, no sheen, no sediment
09:14	2.5	18.1	6.47	1893.0	0.18	-23.3	1.994	
09:16	3.0	18.1	6.47	1891.0	0.16	-29.5	2.131	
09:18	3.5	18.1	6.48	1891.0	0.15	-34.6	2.248	Moderate recharge
09:20	4.0	18.1	6.48	1890.0	0.15	-38.0	2.348	
09:22	4.5	18.1	6.48	1891.0	0.15	-40.7	2.414	
09:24	5.0	18.1	6.48	1893.0	0.14	-42.0	2.450	Pale yellow tinge, clear, no odour, no sheen, no sediment
								Parameters stable, samples collected, moderate recharge

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 ID *(e.g. QC101, QC201)*: QC255 — Dup 1 Name: 0021_QC255_250403

Lab QC collected? Y — Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW060

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	2.221 m bTOC	**Time SWL Measured:**	03:26 PM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	3.485 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	3.2 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF / AEC B	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Stick Up
Sampler:	AD	**Flow Cell Used?**	Yes	**Screened Interval From:**	1.51 to 3.81 m bTOC		
Date:	01/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	2.505 m bTOC		
Round:	April 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*	
15:29	0.3	21.3	5.52	201.3	2.33	86.8	2.437	Pale orange-brown tinge, slightly clear, no odour, no sheen, slight grey sediment
15:31	0.6	21.3	5.56	196.6	2.63	88.8	2.481	Pump on slowest setting
15:33	0.9	21.3	5.59	194.2	2.70	91.8	2.549	
15:35	1.2	21.3	5.57	192.0	2.50	94.8	2.613	
15:37	1.5	21.4	5.57	203.2	1.91	96.5	2.698	
15:39	1.8	21.4	5.54	200.0	1.83	97.1	2.751	Moderate recharge
15:42	2.1	21.4	5.50	197.5	1.83	98.2	2.809	
15:44	2.4	21.4	5.51	201.2	1.75	98.1	2.857	Pale orange-brown tinge, slightly clear, no odour, no sheen, slight grey sediment
								Parameters stable, moderate recharge, samples collected

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

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW061

Job Information		*Sampling Information*		*Monitoring Well Information*			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	0.490 m bTOC	**Time SWL Measured:**	
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	2.570 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	2 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF / AEC A	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Gatic
Sampler:	JM/SF	**Flow Cell Used?**	Yes	**Screened Interval From:**	0.72 to 2.72 m bTOC		
Date:	24/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	m bTOC		
Round:	April 2025 OMP	**Field Filtered?**	No	**Historical ID (if applicable):**			

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*	
09:00	0.5	22.7	6.87	210.2	0.92	-62.5	0.600	Clear, low turbidity, distinct odour, some hydrocarbon sheen
09:05	1.0	22.8	6.72	182.3	0.70	-78.2	0.720	
09:08	1.5	22.7	6.69	192.0	0.66	-154.2	0.760	
09:12	2.0	22.8	6.64	21.1	0.70	-155.4	0.780	
09:16	2.5	22.9	6.62	207.5	0.69	-156.1	0.800	
09:20	3.0	23.0	6.61	209.5	0.68	-162.1	0.810	Clear, low turbidity, distinct H2S odour, distinct hydrocarbon odour and some she
								Samples collected

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

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW062

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	0.630 m bTOC	**Time SWL Measured:**	
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	2.950 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	2 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF / AEC A	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Gatic
Sampler:	JM/SF	**Flow Cell Used?**	Yes	**Screened Interval From:**	0.88 to 2.88 m bTOC		
Date:	24/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	NA m bTOC		
Round:	April 2025 OMP	**Field Filtered?**	No	**Historical ID (if applicable):**			

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*	
08:00	1.0	20.6	6.78	804.0	3.98	94.2	1.020	Clear, non-turbid, hydrocarbon sheem, distinct hydrocarbon odour, no sediment
08:10	3.0	20.7	6.77	800.0	3.45	3.1	1.200	
08:15	4.0	20.6	6.78	797.0	3.38	12.5	1.590	
08:20	5.0	20.6	6.74	794.0	3.04	-1.6	1.740	
08:26	8.0	20.7	6.80	792.0	3.02	-180.3	1.940	
08:30	8.5	20.6	6.78	796.0	3.11	-177.8	2.070	
08:33	9.0	20.5	6.75	795.0	3.08	-167.4	2.110	
08:40	9.5	20.5	6.73	797.0	3.04	-169.3	2.120	Clear, non-turbid, hydrocarbon sheem, distinct hydrocarbon odour, no sediment
								Samples collected

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 ID *(e.g. QC101, QC201)*: — Dup 1 Name:

Lab QC collected? N — Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW063

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	1.055 m bTOC	**Time SWL Measured:**	02:20 PM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	6.040 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	5.5 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF / AEC A	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Stick Up
Sampler:	AK	**Flow Cell Used?**	Yes	**Screened Interval From:**	1.76 to 6.06 m bTOC		
Date:	03/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	1.31 m bTOC		
Round:	April 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*	
14:30	0.5	23.7	4.04	331.5	1.24	52.6	1.185	cloudy white, opaque, no odour or sheen, no sediment
14:33	1.0	23.7	4.04	332.5	0.44	50.0	1.200	
14:36	1.5	23.7	4.04	331.8	0.19	47.4	1.210	
14:39	2.0	23.7	4.02	331.9	0.08	45.5	1.220	
14:42	2.5	23.7	4.02	331.7	0.01	43.5	1.240	
14:45	3.0	23.9	4.02	332.0	0.01	41.8	1.225	recharge stabilising
14:48	3.5	23.9	4.02	332.0	0.01	40.3	1.215	
14:51	4.0	23.9	4.02	331.7	0.01	37.5	1.210	Cloudy white, opaque, no odour or sheen, no sediment
								parameters stable, recharge stable, samples taken

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

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW064

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	1.119 m bTOC	**Time SWL Measured:**	01:02 PM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	6.032 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	5 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF / AEC A	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Stick Up
Sampler:	AD	**Flow Cell Used?**	Yes	**Screened Interval From:**	1.57 to 5.87 m bTOC		
Date:	03/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	2.195 m bTOC		
Round:	April 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*	
13:13	0.5	20.7	5.56	294.5	0.22	-43.5	1.403	Yellow tinge, clear, no odour, no sheen, slight brown sediment
13:16	1.0	20.6	5.51	291.5	0.13	-46.3	1.435	No sediment
13:18	1.5	20.5	5.47	290.2	0.10	-47.2	1.481	
13:21	2.0	20.5	5.49	292.9	0.10	-49.0	1.556	
13:23	2.5	20.5	5.50	293.8	0.08	-49.7	1.596	Good recharge
13:25	3.0	20.5	5.52	296.3	0.14	-50.3	1.676	
13:27	3.5	20.5	5.51	296.4	0.24	-49.3	1.736	
13:30	4.0	20.5	5.54	297.3	0.44	-47.4	1.791	
13:33	4.5	20.5	5.55	297.2	0.71	-44.6	1.846	
13:36	5.0	20.5	5.54	296.9	1.03	-38.3	1.903	
13:39	5.5	20.5	5.54	297.5	1.57	-31.7	1.945	
13:41	6.0	20.6	5.54	296.0	1.59	-24.8	1.998	
13:44	6.5	20.6	5.56	296.5	1.70	-21.7	2.037	Yellow tinge, clear, no odour, no sheen, no sediment, good recharge
								Parameters stable, samples collected

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: Data logger in well

Sample Summary

Samples collected? Yes

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW065

Job Information		Sampling Information		Monitoring Well Information				
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	1.493 m bTOC	**Time SWL Measured:**	11:59 AM	
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	6.034 m bTOC	**Logic Check:**	Yes	
Proj. No.:	12626622	**Sample Depth:**	m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes	
Site:	JBRF / AEC A	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Stick Up	
Sampler:	AD	**Flow Cell Used?**	Yes	**Screened Interval From:**	2.01 to 6.01 m bTOC			
Date:	03/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	2.545 m bTOC			
Round:	April 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*	
12:05	0.5	20.6	6.14	834.0	0.52	-49.9	1.614	Yellow tinge, clear, moderate rotten egg odour, no sheen, slight brown sediment
12:08	1.0	20.7	6.14	834.0	0.34	-66.5	1.656	
12:10	1.5	20.7	6.14	835.0	0.27	-79.9	1.699	
12:13	2.0	20.8	6.15	837.0	0.24	-91.8	1.732	Good recharge
12:16	2.5	20.8	6.15	840.0	0.17	-104.4	1.777	
12:19	3.0	20.9	6.19	872.0	0.13	-117.9	1.844	
12:22	3.5	20.9	6.24	916.0	0.14	-128.6	1.912	
12:24	4.0	20.9	6.26	946.0	0.10	-137.5	1.983	
12:27	4.5	20.9	6.28	972.0	0.06	-143.8	2.052	
12:30	5.0	20.9	6.29	987.0	0.05	-148.5	2.120	
12:32	5.5	20.9	6.30	993.0	0.05	-151.8	2.189	Yellow tinge, clear, moderate rotten egg odour, no sheen, slight brown sediment
								Parameters stable, samples collected, good recharge

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

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW070

Job Information		*Sampling Information*		*Monitoring Well Information*			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	1.030 m bTOC	**Time SWL Measured:**	09:49 AM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	4.640 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	4.5 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF / AEC B	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Stick Up
Sampler:	AK	**Flow Cell Used?**	Yes	**Screened Interval From:**	UN to UN m bTOC		
Date:	07/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	1.445 m bTOC		
Round:	April 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*	
09:59	0.5	19.6	4.79	323.1	0.64	-73.4	1.050	clear, no sediment, slight h2s egg odour, no sheen
10:01	1.0	19.7	4.77	324.3	0.50	-80.0	1.045	
10:04	1.5	19.7	4.77	322.8	0.54	-85.2	1.045	
10:07	2.0	19.7	4.76	321.3	0.51	-89.1	1.050	stable recharge
10:10	2.5	19.7	4.76	321.6	0.33	-91.8	1.050	clear, no sediment, slight h2s egg odour, no sheen
10:12	3.0	19.7	4.76	321.4	0.19	-94.3	1.050	
10:14	3.5	19.7	4.76	321.9	0.04	-97.9	1.050	
10:16	4.0	19.7	4.76	321.2	0.04	-98.0	1.050	
10:18	4.5	19.7	4.76	321.0	0.04	-98.0	1.040	Clear, no sediment, slight hydrogen sulfide odour, no sheen
								parameters stable, recharge stable, samples taken

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

Lab QC collected? Y

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW071

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	0.880 m bTOC	**Time SWL Measured:**	09:52 AM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	3.130 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	2.8 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF / AEC B	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Stick Up
Sampler:	ES	**Flow Cell Used?**	Yes	**Screened Interval From:**	UN to UN m bTOC		
Date:	07/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	1.09 m bTOC		
Round:	April 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*	
11:06	0.5	18.1	5.10	302.0	1.15	-132.6	1.110	Pale brown, moderate to high turbidity, strong organic odour, no sheen
11:10	1.0	18.0	5.13	300.9	0.41	-143.0	1.120	
11:14	1.5	18.1	5.12	300.3	0.35	-146.2	1.140	Pale brown, moderate to high turbidity, strong organic odour, no sheen
11:18	2.0	18.1	5.08	300.7	0.35	-144.4	1.160	
11:22	2.5	18.2	5.02	293.6	0.26	-146.5	1.190	Pale brown, moderate to high turbidity, strong organic odour, no sheen
11:26	3.0	18.2	5.02	291.7	0.25	-144.8	1.210	
11:30	3.5	18.2	5.00	285.6	0.24	-146.6	1.230	Pale brown, moderate to high turbidity, strong organic odour, no sheen
11:34	4.0	18.2	4.98	286.6	0.23	-143.4	1.250	Pale brown, moderate to high turbidity, strong organic odour, no sheen
								Parameters stable, samples collected.

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

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW072

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	0.800 m bTOC	**Time SWL Measured:**	09:44 AM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	3.510 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	3.2 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF / AEC B	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Stick Up
Sampler:	ES	**Flow Cell Used?**	Yes	**Screened Interval From:**	UN to UN m bTOC		
Date:	07/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	0.82 m bTOC		
Round:	April 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*	
09:59	0.5	17.1	5.06	284.2	2.12	-103.1	0.915	Brown, moderate turbidity, organic odour, no sheen.
10:02	1.0	17.0	5.06	266.0	1.52	-104.0	0.970	
10:05	1.5	16.9	5.06	251.2	0.43	-108.4	1.050	Same as above, reduced speed as well is recharging
10:09	2.0	17.3	5.10	247.4	0.32	-112.8	1.090	
10:13	2.5	17.3	5.24	248.7	0.25	-124.3	1.130	Same as above, reduced speed as well is recharging
10:18								Stopped, on phone
10:23	3.0	17.3	5.46	280.6	0.21	-142.0	1.100	
10:28	3.5	17.3	5.53	264.4	0.21	-158.4	1.100	Brown, moderate turbidity, organic odour, no sheen.
10:33	4.0	17.3	5.55	264.8	0.24	-163.8	1.100	
10:38	4.5	17.3	5.56	266.4	0.23	-172.0	1.100	
10:43	5.0	17.3	5.60	266.6	0.25	-170.4	1.100	Brown, moderate turbidity, organic odour, no sheen.
								Parameters stable, samples collected.

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: Initial SWL is essentially at ground surface, considering surface water is present and boggy surrounding area.

Sample Summary

Samples collected? Yes — If duplicate collected, put ID *(e.g. QC101, QC201)*: — Dup 1 Name:

Lab QC collected? N — Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW101

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	0.575 m bTOC	**Time SWL Measured:**	08:30 AM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	1.990 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	1.8 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF / AEC A	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Gatic
Sampler:	AK	**Flow Cell Used?**	Yes	**Screened Interval From:**	1.02 to 2.02 m bTOC		
Date:	04/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	1.54 m bTOC		
Round:	April 2025 OMP	**Field Filtered?**	No	**Historical ID (if applicable):**	A_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*	
08:38	0.5	21.2	6.56	306.9	6.76	106.7	0.940	mostly clear, pale orange tinge, no odour or sheen, trace dark suspended sedim
08:40	1.0	21.2	6.57	313.1	6.87	102.2	1.035	slowed pump
08:42	1.5	21.3	6.56	326.0	6.42	98.0	1.120	slowed pump
08:45	2.0	21.3	6.50	318.5	6.47	93.1	1.260	very slightly cloudy, colour clearing, no odour or sheen, no sediment , slowed pu
08:48	2.5	21.3	6.51	304.7	6.49	86.5	1.430	
08:52	3.0	21.3	6.52	305.2	6.46	84.3	1.430	
08:57							1.420	SWL after a 5 min rest, poor recovery
08:59	3.5	21.3	6.52	305.2	6.46	84.3	1.420	Very slightly cloudy, very slight yellow tinge, no odour or sheen, no sediment
								low water level, parameters mostly stable, samples taken

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 ID *(e.g. QC101, QC201)*: — Dup 1 Name:

Lab QC collected? Y — Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW102

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	No purge	**SWL:**	1.535 m bTOC	**Time SWL Measured:**	09:24 AM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	1.790 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	1.7 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF / AEC A	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Gatic
Sampler:	AK	**Flow Cell Used?**	Yes	**Screened Interval From:**	0.98 to 1.78 m bTOC		
Date:	04/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	1.32 m bTOC		
Round:	April 2025 OMP	**Field Filtered?**	No	**Historical ID (if applicable):**	A_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*	
								water level low, grab sampled
							1.575	post sampling
09:45	0.5	23.6	6.21	718.0	1.24	-95.0	1.700	Cloudy yellow white, opaque, no odour or sheen, no sediment
								grab sampled

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

Lab QC collected? Y

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW103

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	0.731 m bTOC	**Time SWL Measured:**	02:10 PM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	2.782 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	2.5 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF / AEC A	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Stick Up
Sampler:	AD	**Flow Cell Used?**	Yes	**Screened Interval From:**	1.83 to 2.83 m bTOC		
Date:	03/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	1.19 m bTOC		
Round:	April 2025 OMP	**Field Filtered?**	No	**Historical ID (if applicable):**	A_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: 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*	
14:17	0.4	22.1	5.72	433.7	2.32	84.0	1.062	Pale yellow tinge, clear, no odour, no sheen, no sediment
14:20	0.8	22.0	5.69	432.3	2.28	87.7	1.208	
14:23	1.2	22.0	5.68	432.3	2.27	89.1	1.336	Clear, no odour, no sheen, no sediment, no recharge, pump on slowest setting
14:25	1.6	22.0	5.68	431.3	2.28	89.4	1.448	
14:28	2.0	22.0	5.68	430.4	2.20	89.4	1.561	Poor to moderate recharge
14:31	2.4	22.0	5.68	428.4	2.09	89.3	1.648	
14:34	2.8	22.1	5.67	426.6	1.99	89.8	1.731	
14:37	3.2	22.1	5.67	418.9	1.49	89.2	1.816	
14:40	3.6	22.0	5.65	407.2	1.25	88.7	1.866	
14:43	4.0	22.1	5.65	404.1	1.11	88.4	1.868	Great recharge
14:46	4.4	22.2	5.65	398.2	1.02	88.1	1.859	
14:49	4.8	22.2	5.64	398.3	1.13	88.2	1.856	Clear, no odour, no sheen, no sediment, great recharge
								Parameters stable, >1 well volume purged, samples collected

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

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW104

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	1.060 m bTOC	**Time SWL Measured:**	12:56 PM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	2.750 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	2.5 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF / AEC A	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Stick Up
Sampler:	AK	**Flow Cell Used?**	Yes	**Screened Interval From:**	1.82 to 2.82 m bTOC		
Date:	03/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	1.865 m bTOC		
Round:	April 2025 OMP	**Field Filtered?**	No	**Historical ID (if applicable):**	A_MW04		

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*	
13:04	0.5	19.9	4.46	187.8	5.70	69.6	1.650	cloudy white grey, opaque, no odour or sheen
13:07	1.0	20.0	4.48	185.5	5.18	73.1	1.875	slightly cloudy, mostly clear, slowed pump
13:10	1.5	20.1	4.95	183.9	4.88	73.9	2.070	slowed pump to powest setting
13:12	2.0	20.2	4.52	177.8	4.21	75.8	2.300	clody, pale yellow, no odour or sheen
13:16	2.5	20.1	4.52	180.9	4.37	80.4	2.350	water level low
13:29							1.975	swl after pause for recharge, recharge slow
13:32	3.0	20.0	4.49	177.9	4.46	79.6	1.245	Cloudy, pale yellow, no odiur or sheen
								parameters stable, recharge slow but steady, samples taken

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

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW105

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	0.900 m bTOC	**Time SWL Measured:**	11:08 AM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	2.910 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	2.5 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF / AEC A	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Stick Up
Sampler:	AK	**Flow Cell Used?**	Yes	**Screened Interval From:**	1.90 to 2.90 m bTOC		
Date:	03/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	1.49 m bTOC		
Round:	April 2025 OMP	**Field Filtered?**	No	**Historical ID (if applicable):**	A_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: 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*	
11:20	0.5	20.9	4.91	294.8	1.05	87.4	1.095	cloudy, opaque pale orange, no odour or sheen, tracedark suspended sediment
11:23	1.0	20.9	4.96	296.0	1.21	38.4	1.230	slowed pump
11:27	1.5	21.4	5.02	300.0	1.22	5.4	1.320	slowed pump
11:31	2.0	21.5	5.02	301.2	1.27	4.4	1.405	slightly cloudy, slight orange tinge, no odour or sheen, no sediment, slowed pum
11:35	2.5	21.7	5.02	302.9	1.38	10.0	1.500	slowed pump
11:41	3.0	22.2	5.04	306.9	1.13	7.5	1.560	
11:46	3.5	22.4	5.07	309.1	1.68	1.9	1.620	slowed pump
11:51	4.0	22.7	5.08	311.1	1.38	1.8	1.630	
11:56	4.5	22.8	5.08	311.7	1.38	3.2	1.665	
12:01	5.0	22.8	5.08	310.9	1.42	2.7	1.680	Cloudy, opaque, pale orange, no odour or sheen, trace fine dark suspended sed
								parameters stable, recharge okay, samples taken

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

Lab QC collected? Y

If duplicate collected, put ID *(e.g. QC101, QC201)*: QC256

Dup 1 Name: 0021_QC256_250403

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW106

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	0.860 m bTOC	**Time SWL Measured:**	10:25 AM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	2.365 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	2.2 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF / AEC A	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Gatic
Sampler:	AK	**Flow Cell Used?**	Yes	**Screened Interval From:**	1.10 to 2.60 m bTOC		
Date:	04/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	1.145 m bTOC		
Round:	April 2025 OMP	**Field Filtered?**	No	**Historical ID (if applicable):**	A_MW06		

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*	
10:32	0.5	21.7	6.30	442.8	0.27	-158.2	1.035	pale orange grey, opaque, no odour or sheen, fine dark grey suspended sedime
10:35	1.0	21.5	6.27	469.3	0.09	-171.1	1.110	
10:39	1.5	21.5	6.27	478.6	0.03	-177.6	1.260	pump on lowest setting
10:42	2.0	21.5	6.27	468.1	0.00	-179.4	1.405	
10:45	2.5	21.5	6.26	453.4	0.05	-174.7	1.555	
10:48	3.5	21.5	6.27	441.5	0.24	-166.6	1.690	pale orange grey, opaque, no odour or sheen, fine dark grey suspended sedime
10:52	4.0	21.5	6.29	420.1	0.57	-157.7	1.830	
10:55	4.5	21.5	6.34	371.4	2.12	-131.9	1.990	
10:58	5.0	21.5	6.35	365.4	2.93	-117.1	2.120	
11:02							1.850	SWL after 5 min break from purging, slow recovery
11:05	5.5	21.5	6.38	360.7	4.77	-90.8	1.940	pale orange grey, opaque, no odour or sheen, fine dark grey suspended sedime
11:08	6.0	21.5	6.32	359.6	4.37	-83.7	2.075	Pale orange grey, opaque, no odour or sheen, fine dark grey suspended sedime
								low water level, samples taken

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 ID *(e.g. QC101, QC201)*: — Dup 1 Name:

Lab QC collected? Y — Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW107

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	0.821 m bTOC	**Time SWL Measured:**	11:06 AM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	4.706 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	4.4 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF / AEC A	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Stick Up
Sampler:	AD	**Flow Cell Used?**	Yes	**Screened Interval From:**	1.76 to 4.76 m bTOC		
Date:	03/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	1.98 m bTOC		
Round:	April 2025 OMP	**Field Filtered?**	No	**Historical ID (if applicable):**	A_MW07		

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*	
11:12	0.4	21.7	6.05	569.0	0.79	68.1	1.087	Clear, no odour, no sheen, slight brown sediment
11:14	0.8	21.7	6.05	565.0	0.51	69.7	1.205	
11:16	1.2	21.7	6.05	564.0	0.41	74.4	1.295	Clear, no odour, no sheen, no sediment
11:18	1.6	21.7	6.05	563.0	0.34	77.8	1.356	Pump flow rate slowed
11:20	2.0	21.7	6.05	563.0	0.29	81.2	1.404	
11:22	2.4	21.7	6.06	566.0	0.25	83.2	1.439	
11:24	2.8	21.6	6.07	569.0	0.22	84.1	1.464	
11:26	3.2	21.6	6.10	580.0	0.19	81.9	1.493	
11:28	3.6	21.5	6.13	592.0	0.18	76.5	1.507	Good recharge
11:30	4.0	21.5	6.16	602.0	0.15	70.4	1.519	
11:32	4.4	21.5	6.18	612.0	0.14	64.8	1.524	
11:34	4.8	21.6	6.24	636.0	0.15	55.7	1.529	
11:36	5.2	21.6	6.25	647.0	0.14	50.5	1.534	
11:38	5.6	21.5	6.28	655.0	0.14	46.2	1.535	Clear, no odour, no sheen, no sediment
								Parameters stable, samples collected

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

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*: QC156

Dup 1 Name: 0021_QC156_250403

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW108

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	1.155 m bTOC	**Time SWL Measured:**	10:28 AM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	3.200 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	3 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF / AEC A	**WQuality Meter Type:**	YSI	**NAPL Depth:**	- m bTOC	**Gatic or Stick Up?**	Stick Up
Sampler:	ES	**Flow Cell Used?**	Yes	**Screened Interval From:**	1.95 to 3.45 m bTOC		
Date:	04/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	NA m bTOC		
Round:	April 2025 OMP	**Field Filtered?**	No	**Historical ID (if applicable):**	A_MW08		

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*	
10:34	0.5	20.3	5.63	172.9	4.28	48.6	1.360	
10:37	1.0	20.0	5.64	170.5	3.59	37.9	1.500	Pale yellow, clear, no odour or sheen.
10:41	1.5	19.9	5.66	171.6	3.29	35.4	1.625	Reduced speed to lowest
10:46	2.0	20.0	5.68	172.5	2.99	32.4	1.790	Pale yellow, clear, no odour or sheen.
10:51	2.5	19.9	5.68	166.8	2.54	26.6	1.850	
10:56	3.0	19.8	5.69	166.5	2.48	27.2	2.000	Pale yellow, clear, no odour or sheen.
11:01	3.5	19.7	5.69	168.6	2.72	27.1	2.130	Pale yellow, clear, no odour or sheen.
								Parameters stable, samples collected.

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

Lab QC collected? Y

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW109

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	0.295 m bTOC	**Time SWL Measured:**	12:25 PM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	3.960 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	3.7 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF / AEC A	**WQuality Meter Type:**	YSI	**NAPL Depth:**	- m bTOC	**Gatic or Stick Up?**	Stick Up
Sampler:	ES	**Flow Cell Used?**	Yes	**Screened Interval From:**	0.94 to 3.94 m bTOC		
Date:	03/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	1.55 m bTOC		
Round:	April 2025 OMP	**Field Filtered?**	No	**Historical ID (if applicable):**	A_MW09		

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*	
12:33	0.5	21.0	5.04	3.5	7.86	-96.4	0.530	Pale brown, clear, organic odour, no sheen. SWL dropping
12:36	1.0	21.0	4.87	3.4	8.10	-67.0	0.720	
12:39	1.5	20.9	5.17	215.2	0.35	-109.7	0.900	Parameters changed significantly
12:42	2.0	21.1	5.33	197.8	0.45	-89.0	1.080	
12:45	2.5	21.1	5.38	207.4	0.38	-105.6	1.210	Pale brown, clear, organic odour, no sheen.
12:48	3.0	21.1	5.41	206.0	0.41	-103.2	1.340	Reduced speed.
12:52	3.5	21.2	5.45	211.7	0.30	-110.9	1.520	Reduced speed.
12:57	4.0	21.2	5.37	219.5	0.31	-109.9	1.750	
13:02	4.5	21.3	5.26	225.0	0.77	-101.5	1.850	Pale brown, clear, organic odour, no sheen.
13:07	5.0	21.2	5.20	228.7	0.70	-87.8	1.940	SWL still dropping, parameters fluctuating, reduced pump speed to lowest
13:11	5.3	21.3	5.19	227.2	0.73	-70.2	2.000	
13:15	5.6	21.4	5.18	226.4	0.76	-64.3	2.070	Pale brown, clear, organic odour, no sheen.
13:19	5.9	21.4	5.12	225.7	0.89	-46.2	2.130	
13:23	6.2	21.4	5.06	225.4	1.08	-38.0	2.180	Pale brown, clear, organic odour, no sheen.
13:27	6.5	21.3	5.03	227.3	1.16	-34.6	2.230	
13:31	6.8	21.4	5.02	227.2	1.15	-37.7	2.280	Pale brown, clear, organic odour, no sheen.
13:35	7.1	21.4	4.99	228.5	1.15	-32.4	2.330	Pale brown, clear, organic odour, no sheen.
								Parameters stabilised, sampled. SWL not stable.

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

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW110

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	1.117 m bTOC	**Time SWL Measured:**	02:01 PM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	2.771 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	2.4 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF / AEC B	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Gatic
Sampler:	AD	**Flow Cell Used?**	Yes	**Screened Interval From:**	1.75 to 2.75 m bTOC		
Date:	01/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	1.965 m bTOC		
Round:	April 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*	
14:07	0.3	21.7	4.86	322.7	0.30	21.1	1.209	Yellow-brown tinge, cloudy, mod. rotten egg odour, no sheen, slight dk. brown se
14:09	0.6	21.7	4.93	302.0	0.28	7.8	1.207	Great recharge, flow rate increased slightly
14:12	1.1	21.5	5.01	286.9	0.24	-2.7	1.219	
14:14	1.6	21.2	5.04	277.5	0.18	-8.4	1.221	Pale yellow tinge, slightly clear, slight rotten egg odour, no sheen, no sediment
14:16	2.1	21.1	5.04	274.9	0.15	-13.9	1.223	
14:19	2.6	21.1	5.05	273.7	0.14	-19.2	1.224	Pale yellow tinge, clear
14:22	3.1	21.0	5.05	273.0	0.15	-25.2	1.191	
14:24	3.6	21.2	5.03	274.9	0.15	-25.8	1.222	Pale yellow tinge, clear, slight rotten egg odour, no sheen, no sediment
								Parameters stable, >1 well volume purged, samples collected

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

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW111

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	0.941 m bTOC	**Time SWL Measured:**	02:40 PM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	2.421 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	2.1 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF / AEC B	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	
Sampler:	AD	**Flow Cell Used?**	Yes	**Screened Interval From:**	1.84 to 2.84 m bTOC		
Date:	01/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	1.82 m bTOC		
Round:	April 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: 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*	
14:47	0.3	21.9	5.11	90.8	1.86	34.0	0.999	Pale yellow tinge, slightly clear, slight rotten egg odour, no sheen, slight grey sed
14:49	0.8	21.9	5.02	89.8	0.91	20.5	0.999	Great recharge
14:51	1.3	22.0	5.02	89.9	0.63	7.7	1.001	
14:53	1.8	22.0	5.01	89.6	0.35	-0.8	1.002	
14:55	2.3	21.9	5.07	89.8	0.81	-4.9	1.002	
14:57	2.8	21.9	5.07	90.2	0.69	-9.1	1.004	Pale yellow tinge, mostly clear, slight rotten egg odour, no sheen, no sediment
14:59	3.3	21.8	5.07	90.0	0.98	-10.1	1.004	Clear
15:01	3.8	21.9	5.06	90.0	0.96	-12.4	1.001	
15:03	4.3	21.9	5.06	90.1	0.90	-16.4	1.009	Pale yellow tinge, clear, slight rotten egg odour, no sheen, slight grey sediment
								Parameters stable, >1 well volume purged, samples collected
08:45							1.222	8/4/25, recollect sample with bailer as it was lost
08:47	1.0	21.3	5.10	88.8	1.51	28.1	1.302	Pale yellow tinge, clear, slight rotten egg odour, no sheen, no sediment
								Samples collected, paramaters similar to 1/04

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

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW112

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	1.052 m bTOC	**Time SWL Measured:**	01:17 PM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	2.908 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	2.4 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF / AEC B	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Stick Up
Sampler:	AD	**Flow Cell Used?**	Yes	**Screened Interval From:**	1.92 to 3.42 m bTOC		
Date:	01/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	2.385 m bTOC		
Round:	April 2025 OMP	**Field Filtered?**	No	**Historical ID (if applicable):**	B_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: 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*	
13:26	0.3	21.2	5.16	354.0	2.62	216.3	1.189	Pale yellow tinge, mostly clear, no odour, no sheen, no sediment
13:28	0.6	21.2	5.15	363.0	2.11	215.8	1.221	Pump flow rate reduced
13:30	0.9	21.2	5.14	365.9	2.14	214.8	1.278	
13:32	1.2	21.1	5.16	362.4	1.98	213.8	1.332	Good recharge
13:34	1.5	21.3	5.14	363.7	2.06	212.9	1.378	
13:36	1.8	21.3	5.15	364.9	1.70	211.4	1.413	
13:37	2.1	21.1	5.19	356.7	1.68	210.0	1.449	
13:39	2.4	21.0	5.18	352.7	1.67	209.3	1.494	
13:41	2.7	21.0	5.20	351.7	1.62	209.0	1.508	Pale yellow tinge, mostly clear, no odour, no sheen, no sediment
								Parameters stable, samples collected

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

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*: QC154

Dup 1 Name: 0021_QC154_250401

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW113

Job Information		*Sampling Information*		*Monitoring Well Information*			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	0.975 m bTOC	**Time SWL Measured:**	11:02 AM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	2.700 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	2.6 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF / AEC B	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Stick Up
Sampler:	AK	**Flow Cell Used?**	Yes	**Screened Interval From:**	1.78 to 2.78 m bTOC		
Date:	07/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	2.15 m bTOC		
Round:	April 2025 OMP	**Field Filtered?**	No	**Historical ID (if applicable):**	B_MW04		

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*	
11:09	0.5	20.4	4.85	187.9	5.42	25.3	1.060	very pale yellow, cloudy and opaque, no odour or sheen, no sediment , slowed p
11:13	1.0	20.5	4.84	189.0	4.72	32.4	1.055	
11:17	1.5	20.3	4.83	188.2	4.83	37.4	1.065	good recharge
11:20	2.0	20.3	4.83	188.8	4.68	41.1	1.065	mostly clear, no odour or sheen, no sediment
11:23	2.5	20.4	4.83	188.7	4.80	44.2	1.070	slowed pump
11:27	3.0	20.4	4.82	188.0	4.75	47.1	1.065	
11:31	3.5	20.3	4.81	188.9	4.53	52.4	1.065	
11:35	4.0	20.4	4.81	188.9	4.51	52.7	1.065	clear, no odour or sheen, no sediment, great recharge
								parameters stable, recharge stable, samples taken

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

Lab QC collected? Y

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW114

Job Information		Sampling Information		Monitoring Well Information					
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	1.161 m bTOC	**Time SWL Measured:**	09:00 AM		
Project:	JBRF / Creswell OMP	**Sample Method:**	Micropurge	**Well Depth:**	7.668 m bTOC	**Logic Check:**	Yes		
Proj. No.:	12626622	**Sample Depth:**	6 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes		
Site:	BNP / Bherwerre Barrier	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Stick Up		
Sampler:	AT	**Flow Cell Used?**	Yes	**Screened Interval From:**	4.53 to 7.53 m bTOC		0.89		
Date:	04/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	0.21 m bTOC				
Round:	April 2025 OMP	**Field Filtered?**	No	**Historical ID (if applicable):**	BB_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*	
09:00	1.5	19.6	6.65	613.0	0.97	-143.9	1.172	Milky brown, medium turbidity, no odour, no sheen, no sediment
09:05	3.0	19.6	6.65	611.0	0.78	-165.6	1.173	as above
09:10	4.5	19.6	6.67	609.0	0.58	-188.8	1.171	as above
09:15	6.0	19.6	6.66	607.0	0.42	-196.7	1.169	as above
09:20	7.5	19.6	6.65	606.0	0.28	202.0	1.170	as above
09:25	9.0	19.5	6.65	606.0	0.26	203.7	1.170	as above
09:30	10.5	19.5	6.65	605.0	0.27	204.8	1.171	Milky brown, medium turbidity, no odour, no sheen, no sediment
								Sampled.

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 ID *(e.g. QC101, QC201)*: QC109, QC209 — Dup 1 Name: 0021_QC109_250404

Lab QC collected? Y — Dup 2 Name: 0021_QC209_250404

Purging and Sampling Record

Well ID: 0021_MW115

Job Information		*Sampling Information*		*Monitoring Well Information*			
Client:	Department of Defence	**Purge Method:**		**SWL:**	m bTOC	**Time SWL Measured:**	
Project:	JBRF / Creswell OMP	**Sample Method:**		**Well Depth:**	m bTOC	**Logic Check:**	No
Proj. No.:	12626622	**Sample Depth:**	m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	
Site:	BNP / Bherwerre Barrier	**WQuality Meter Type:**		**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	
Sampler:	JM/AT	**Flow Cell Used?**		**Screened Interval From:**	1.69 to 4.69 m bTOC		
Date:	04/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	NA m bTOC		
Round:	April 2025 OMP	**Field Filtered?**	No	**Historical ID (if applicable):**	BB_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*	
								Unable to access well, location inaccessible due to flooded road and swamp.

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

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW117

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	0.085 m bTOC	**Time SWL Measured:**	12:00 AM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	1.902 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	1.75 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF / AEC C	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Gatic
Sampler:	AD	**Flow Cell Used?**	Yes	**Screened Interval From:**	0.97 to 1.97 m bTOC		
Date:	02/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	0.75 m bTOC		
Round:	April 2025 OMP	**Field Filtered?**	No	**Historical ID (if applicable):**	C_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*	
13:52	0.3	21.9	6.35	967.0	1.00	37.1	0.368	Pale yellow tinge, clear, no odour, no sheen, no sediment
13:54	0.6	21.9	6.35	910.0	0.76	19.2	0.491	Pump flow rate reduced to slowest setting
13:57	0.9	21.8	6.35	800.0	1.94	12.4	0.620	
13:59	1.2	21.7	6.38	686.0	3.83	20.2	0.717	
14:02	1.5	21.7	6.40	598.0	4.38	27.6	0.846	No recharge
14:04	1.8	21.7	6.40	539.0	4.49	35.8	0.946	
14:06	2.1	21.7	6.41	498.9	4.40	41.6	1.004	
14:08	2.4	21.8	6.36	472.4	4.10	44.0	1.004	Water level within screen, good recharge
14:10	2.7	21.8	6.30	587.0	3.10	34.7	1.006	
14:12	3.0	21.8	6.34	605.0	2.52	22.8	1.008	
14:14	3.3	21.9	6.26	612.0	1.74	15.5	1.007	
14:16	3.6	21.9	6.25	668.0	1.24	5.6	1.048	
14:18	3.9	21.9	6.26	695.0	1.08	-0.3	1.090	
14:20	4.2	21.9	6.27	703.0	1.07	-4.7	1.145	
14:22	4.5	21.9	6.29	713.0	1.01	-10.3	1.203	Pale yellow tinge, clear, no odour, no sheen, no sediment, good recharge
								Parameters stable, >1 well volume purged, samples collected

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: Water above well cap, dewatered before sampling

Sample Summary

Samples collected? Yes — If duplicate collected, put ID *(e.g. QC101, QC201)*: — Dup 1 Name:

Lab QC collected? N — Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW118

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	0.436 m bTOC	**Time SWL Measured:**	02:44 PM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	2.901 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	2.6 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF / AEC C	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Gatic
Sampler:	AD	**Flow Cell Used?**	Yes	**Screened Interval From:**	0.96 to 2.97 m bTOC		
Date:	02/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	0.61 m bTOC		
Round:	April 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*	
14:51	0.4	21.3	6.64	916.0	0.43	-14.4	0.682	Clear, slight rotten egg odour, no sheen, no sediment
14:54	0.8	21.4	6.64	890.0	0.37	0.6	0.829	
14:57	1.2	21.4	6.65	793.0	0.23	-37.7	0.981	
15:00	1.6	21.4	6.67	653.0	0.20	-42.5	0.979	
15:03	2.0	21.4	6.69	558.0	0.36	-41.6	1.043	
15:06	2.4	21.4	6.71	511.0	0.64	-38.4	1.114	Moderate to good recharge
15:09	2.8	21.4	6.72	485.0	1.00	-34.7	1.197	
15:12	3.2	21.4	6.73	478.7	1.22	-31.1	1.278	Pump flow rate reduced to slowest setting
15:15	3.6	21.5	6.74	491.5	1.04	-29.7	1.346	
15:18	4.0	21.5	6.75	502.0	0.61	-32.7	1.416	No odour
15:22	4.4	21.5	6.74	529.0	0.48	-36.6	1.483	
15:25	4.8	21.5	6.72	556.0	0.37	-40.3	1.551	
15:28	5.2	21.5	6.71	586.0	0.34	-44.9	1.619	
15:31	5.6	21.4	6.71	596.0	0.33	-49.1	1.677	
15:34	6.0	21.4	6.71	604.0	0.33	-50.4	1.722	Clear, no odour, no sheen, no sediment
								Parameters stable, >1 well volume purged, samples collected

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: Water above well cap, dewatered before sampling

Sample Summary

Samples collected? Yes — If duplicate collected, put ID *(e.g. QC101, QC201)*: — Dup 1 Name:

Lab QC collected? N — Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW119

Job Information		*Sampling Information*		*Monitoring Well Information*			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	0.220 m bTOC	**Time SWL Measured:**	02:34 PM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	1.910 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	1.9 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF / AEC C	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Gatic
Sampler:	AK	**Flow Cell Used?**	Yes	**Screened Interval From:**	1.01 to 2.01 m bTOC		
Date:	02/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	1.18 m bTOC		
Round:	April 2025 OMP	**Field Filtered?**	No	**Historical ID (if applicable):**	C_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: 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*	
14:45	0.5	22.4	6.36	266.6	5.46	46.1	0.540	cloudy grey, opaque, no odour or sheen, pump on lowest speed
14:00	1.0	22.2	6.32	261.2	5.70	48.0	0.665	
14:54	1.5	22.2	6.31	274.1	5.08	48.3	0.795	
14:58	2.0	22.3	6.31	282.9	4.50	48.3	0.920	
15:01	2.5	22.3	6.34	285.3	4.60	44.8	1.080	
15:05	3.0	22.3	6.33	287.4	4.73	45.0	1.265	Cloudy white, opaque, no odour or sheen
								parameters stable, samples taken

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

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW120

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	0.365 m bTOC	**Time SWL Measured:**	01:22 PM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	2.905 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	2.5 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF / AEC C	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Gatic
Sampler:	AK	**Flow Cell Used?**	Yes	**Screened Interval From:**	0.95 to 2.96 m bTOC		
Date:	02/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	0.86 m bTOC		
Round:	April 2025 OMP	**Field Filtered?**	No	**Historical ID (if applicable):**	C_MW04		

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*	
13:33	0.5	21.7	6.03	291.7	3.18	55.0	0.550	cloudy pale orange grey, no odour or sheen, slowed pump
13:36	1.0	21.8	6.09	248.0	3.18	56.0	1.070	
13:39	1.5	21.7	6.05	253.3	2.95	55.0	1.200	slowed pump
13:42	2.0	21.8	5.96	277.2	5.95	47.3	1.370	
13:45	2.5	21.8	5.91	378.7	5.87	37.9	1.540	slowed pump
13:48	3.0	21.9	5.88	363.5	5.87	38.3	1.685	
13:51	3.5	21.8	5.76	454.4	0.58	39.0	1.815	slowed pump
13:54	4.0	22.1	5.75	590.0	1.55	39.1	1.950	cloudy white, no odour or sheen, swl dropping, pump is as slow as possible
13:58	4.5	21.3	5.57	1223.0	0.59	4.2	2.090	
14:01	5.0	21.4	5.67	862.0	0.38	8.5	2.270	
14:04	5.5	21.4	5.66	861.0	0.32	5.5	2.340	
14:07	6.0	21.4	5.65	883.0	0.29	-4.3	2.390	
14:10	6.5	21.3	5.63	928.0	0.24	-2.1	2.430	
14:13	7.0	21.3	5.61	960.0	0.22	-0.6	2.460	
14:16	7.5	21.3	5.59	1000.0	0.19	0.5	2.480	Cloudy white, no odour or sheen, low water level, samples taken

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

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW121

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	0.310 m bTOC	**Time SWL Measured:**	04:14 PM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	2.630 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	2.5 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF / AEC C	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Gatic
Sampler:	AK	**Flow Cell Used?**	Yes	**Screened Interval From:**	0.70 to 2.70 m bTOC		
Date:	02/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	1.18 m bTOC		
Round:	April 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: 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*	
16:19	0.5	21.3	6.37	163.3	0.68	38.9	0.420	cloudy yellow grey, no odour or sheen
16:23	1.0	21.3	6.37	168.7	0.38	33.4	0.565	
16:27	1.5	21.3	6.36	172.0	0.28	27.1	0.680	slowed pump to lowest setting
16:31	2.0	21.1	6.35	176.8	0.32	18.9	0.790	
16:34	2.5	21.2	6.34	176.9	0.34	-4.2	0.835	
16:37	3.0	21.2	6.32	177.8	0.27	-34.2	0.870	
16:41	3.5	21.2	6.30	187.7	0.34	-67.7	0.960	
16:45	4.0	21.2	6.26	189.7	0.30	-70.0	1.045	cloudy yellow grey, no odour or sheen
16:49	4.5	21.2	6.19	198.7	0.27	-82.8	1.130	
16:53	5.0	21.2	6.12	206.0	0.28	-88.5	1.189	
16:57	5.5	21.2	6.08	207.4	0.25	-91.8	1.221	
17:01	6.0	21.2	6.02	218.7	0.16	-93.0	1.200	cloudy yellow grey, no odour or sheen
17:05	6.5	21.3	5.91	241.6	0.08	-93.3	1.190	
17:09	7.0	21.3	5.90	242.4	0.08	-93.2	1.210	
17:13	7.5	21.3	5.90	245.2	0.07	-93.9	1.200	Cloudy yellow grey, no odour or sheen
								parameters mostly stable, recharge stable, samples taken

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

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW123

Job Information		*Sampling Information*		*Monitoring Well Information*			
Client:	Department of Defence	**Purge Method:**	Purge	**SWL:**	0.530 m bTOC	**Time SWL Measured:**	03:00 PM
Project:	JBRF / Creswell OMP	**Sample Method:**	Bailer	**Well Depth:**	2.820 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	2 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF / AEC C	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Gatic
Sampler:	JNM	**Flow Cell Used?**	Yes	**Screened Interval From:**	1.01 to 2.81 m bTOC		
Date:	02/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	1.425 m bTOC		
Round:	April 2025 OMP	**Field Filtered?**	No	**Historical ID (if applicable):**	C_MW07		

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*	
15:00	1.0	23.3	6.10	319.9	2.62	205.3	0.530	Clear, low turbidity, some suspended solids, no odour, no sheen,
15:05	3.0	22.5	5.97	327.9	2.50	207.8	0.610	Cloudy, pale brown, grey, no odour, no sheen
15:12	6.0	22.4	5.95	331.4	2.41	205.9	0.640	same as above
15:18	12.0	22.2	5.92	328.8	2.44	200.1	0.670	Cloudy, pale brown, grey, no odour, no sheen
								Sampled

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

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW124

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	0.818 m bTOC	**Time SWL Measured:**	07:53 AM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	3.118 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	2.8 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF / Captains Lagoon	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Stick Up
Sampler:	AD	**Flow Cell Used?**	Yes	**Screened Interval From:**	1.60 to 3.40 m bTOC		
Date:	03/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	1.42 m bTOC		
Round:	April 2025 OMP	**Field Filtered?**	No	**Historical ID (if applicable):**	CL_MW01, 0020_MW101		

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*	
08:00	0.3	18.3	5.21	223.9	1.22	58.9	1.019	Pale yellow tinge, clear, slight rotten egg odour, no sheen, no sediment
08:02	0.6	18.4	5.25	221.3	1.11	44.6	1.021	Pump flow rate reduced to slowest setting
08:04	0.9	18.5	5.24	220.5	1.12	24.6	1.029	Great recharge
08:06	1.2	18.6	5.25	220.4	0.99	13.8	1.038	Clear, slight rotten egg odour, no sheen, no sediment
08:08	1.5	18.6	5.25	219.3	0.79	5.6	1.043	
08:10	1.8	18.6	5.25	220.8	0.68	-2.0	1.048	
08:12	2.1	18.6	5.25	219.0	0.60	-6.9	1.044	
08:14	2.4	18.7	5.25	219.6	0.51	-12.1	1.042	
08:16	2.7	18.7	5.23	217.0	0.45	-16.1	1.039	
08:18	3.0	18.7	5.23	217.2	0.34	-19.4	1.039	
08:20	3.3	18.7	5.23	217.3	0.29	-22.7	1.038	
08:22	3.6	18.8	5.23	217.4	0.28	-25.0	1.038	
08:24	3.9	18.8	5.22	217.2	0.27	-27.1	1.037	Clear, slight rotten egg odour, no sheen, no sediment
								Sampled

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 ID *(e.g. QC101, QC201)*: — Dup 1 Name:

Lab QC collected? Y — Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW125

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	1.279 m bTOC	**Time SWL Measured:**	11:18 AM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	3.686 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	3.3 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Stick Up
Sampler:	AD	**Flow Cell Used?**	Yes	**Screened Interval From:**	1.95 to 3.95 m bTOC		
Date:	02/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	1.44 m bTOC		
Round:	April 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: 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*	
11:24	0.3	19.9	5.34	187.9	0.46	22.6	1.553	Brown tinge, mostly clear, slight rotten egg odour, no sheen, slight brown sedime
11:26	0.6	20.0	5.34	185.3	0.29	7.8	1.664	Pump flow rate reduced
11:28	0.9	20.1	5.33	184.8	0.24	-3.1	1.761	Clear, slight rotten egg odour, no sheen, slight brown sediment
11:30	1.2	20.2	5.33	183.9	0.20	-11.9	1.864	
11:33	1.5	20.2	5.34	182.5	0.18	-19.6	1.951	Pump flow rate reduced to slowest setting
11:36	1.8	20.3	5.36	182.1	0.17	-25.4	2.051	
11:39	2.1	20.3	5.40	180.6	0.16	-29.7	2.155	
11:42	2.4	20.4	5.45	183.1	0.20	-30.3	2.246	Poor to moderate recharge
11:45	2.7	20.4	5.48	187.6	0.24	-30.8	2.319	
11:48	3.0	20.4	5.51	193.4	0.44	-29.1	2.365	
11:51	3.3	20.5	5.56	207.5	0.90	-25.9	2.446	
11:54	3.6	20.5	5.62	213.4	1.27	-19.1	2.541	
11:57	3.9	20.5	5.63	215.9	1.50	-14.7	2.620	
12:00	4.2	20.4	5.64	217.2	1.54	-10.4	2.714	
12:03	4.5	20.5	5.67	222.2	1.65	-6.4	2.779	Clear, slight rotten egg odour, no sheen, slight brown sediment
								Parameters stable, samples collected, poorto moderate recharge

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

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW126

Job Information		Sampling Information		Monitoring Well Information					
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	1.090 m bTOC	**Time SWL Measured:**	12:30 PM		
Project:	JBRF / Creswell OMP	**Sample Method:**	Low flow	**Well Depth:**	9.745 m bTOC	**Logic Check:**	Yes		
Proj. No.:	12626622	**Sample Depth:**	m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes		
Site:	JBRF	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Stick Up		
Sampler:	JM	**Flow Cell Used?**	Yes	**Screened Interval From:**	6.74 to 9.74 m bTOC		0.685		
Date:	01/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	1.49 m bTOC				
Round:	April 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: 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*	
12:45	2.0	20.0	6.21	841.1	2.77	-179.6	1.780	clear, non-turbid, no sheen, no odour, no sediment
12:55	4.0	19.6	6.18	837.1	1.26	-194.4	2.200	as above
13:00	5.0	19.3	6.20	836.0	1.44	-184.0	2.350	as above
13:05	6.0	19.0	6.10	855.0	1.55	-185.2	2.441	as above
13:10	7.0	19.0	6.05	845.0	1.39	-186.0	2.485	as above
13:15	8.0	18.9	6.06	845.1	1.44	-184.2	2.505	Clear, non-turbid, no sheen, no odour, no sediment
								sampled.

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

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*: QC105, QC205

Dup 1 Name: 0021_QC105_250401

Dup 2 Name: 0021_QC205_250401

Purging and Sampling Record

Well ID: 0021_MW127

Job Information		*Sampling Information*		*Monitoring Well Information*			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	1.412 m bTOC	**Time SWL Measured:**	03:58 PM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	6.686 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	5.6 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Gatic
Sampler:	AD	**Flow Cell Used?**	Yes	**Screened Interval From:**	3.98 to 6.98 m bTOC		
Date:	02/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	1.99 m bTOC		
Round:	April 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: 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*	
16:05	0.5	21.5	4.15	684.0	0.43	83.7	1.436	Pale orange tinge, clear, no odour, no sheen, slight light-orange sediment
16:08	1.0	21.4	4.14	685.0	0.41	81.0	1.446	Clear, no odour, no sheen, no sediment
16:12	2.0	21.3	4.15	684.0	0.33	75.1	1.472	Great recharge, pump flow rate increased
16:16	3.0	21.3	4.15	683.0	0.32	71.0	1.482	
16:19	4.0	21.3	4.15	684.0	0.24	67.4	1.490	
16:22	5.0	21.3	4.16	685.0	0.28	63.1	1.496	
16:26	6.0	21.3	4.16	685.0	0.29	59.5	1.498	
16:29	7.0	21.3	4.17	685.0	0.27	56.0	1.504	Clear, no odour, no sheen, no sediment
								Parameters stable, samples collected

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: Potential blockage at bottom of well, expected depth ~0.3m lower

Sample Summary

Samples collected? Yes — If duplicate collected, put ID *(e.g. QC101, QC201)*: — Dup 1 Name:

Lab QC collected? N — Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW128

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	2.121 m bTOC	**Time SWL Measured:**	09:50 AM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	5.999 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	5 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Stick Up
Sampler:	AD	**Flow Cell Used?**	Yes	**Screened Interval From:**	3.29 to 6.29 m bTOC		
Date:	02/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	2.54 m bTOC		
Round:	April 2025 OMP	**Field Filtered?**	No	**Historical ID (if applicable):**	LM_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*	
10:00	1.0	21.6	4.21	876.0	0.18	130.4	2.122	Clear, no odour, no sheen, no sediment
10:03	2.0	21.5	4.21	887.0	0.13	119.2	2.123	Great recharge
10:06	3.0	21.5	4.21	894.0	0.10	113.3	2.123	
10:09	4.0	21.5	4.20	896.0	0.09	108.6	2.124	
10:12	5.0	21.5	4.20	895.0	0.11	104.4	2.123	
10:15	6.0	21.5	4.20	894.0	0.12	100.3	2.123	
10:18	7.0	21.5	4.19	891.0	0.12	96.6	2.124	Clear, no odour, no sheen, no sediment
								Parameters stable, samples collected

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

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*: QC155

Dup 1 Name: 0021_QC155_250402

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW129

Job Information		Sampling Information		Monitoring Well Information					
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	19.324 m bTOC	**Time SWL Measured:**	12:20 PM		
Project:	JBRF / Creswell OMP	**Sample Method:**	Micropurge	**Well Depth:**	31.515 m bTOC	**Logic Check:**	Yes		
Proj. No.:	12626622	**Sample Depth:**	28 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes		
Site:	BNP / Lake McKenzie	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Stick Up		
Sampler:	AT	**Flow Cell Used?**	Yes	**Screened Interval From:**	27.06 to 31.56 m bTOC		0.9		
Date:	04/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	17.78 m bTOC				
Round:	April 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: 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*	
12:20	0.5	17.7	5.89	525.0	0.66	-137.9	20.940	clear, no colour, no sediment, no odour
12:25	1.0	17.8	5.89	526.0	0.46	-137.2	21.270	as above, flow rate slowed
12:30	1.5	17.8	5.87	528.0	0.37	-136.7	21.480	as above, flow rate slowed
12:35	2.0	17.8	5.90	531.0	0.36	-138.4	21.745	as above
12:40	2.3	17.8	5.92	540.0	0.30	-142.3	21.882	as above
12:45	2.5	18.0	5.90	539.0	0.30	-142.3	21.999	as above
12:50	2.8	18.0	5.91	537.0	0.30	-147.7	22.159	as above
12:55	3.0	18.1	5.89	536.0	0.28	-142.6	22.335	Clear, no colour, no sediment, no odour
								Sampled.

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

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW130

Job Information		Sampling Information		Monitoring Well Information					
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	7.724 m bTOC	**Time SWL Measured:**	03:00 PM		
Project:	JBRF / Creswell OMP	**Sample Method:**	Micropurge	**Well Depth:**	36.145 m bTOC	**Logic Check:**	Yes		
Proj. No.:	12626622	**Sample Depth:**	33 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes		
Site:	BNP / Lake Windermere	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Stick Up		
Sampler:	AT	**Flow Cell Used?**	Yes	**Screened Interval From:**	26.95 to 35.95 m bTOC		0.935		
Date:	04/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	7.29 m bTOC				
Round:	April 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: 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*	
15:10	0.5	18.8	6.32	554.0	3.70	-159.9	7.650	low turbidity, pale brown colour, organics odour, no sediment, no sheen
15:15	1.5	18.7	6.34	546.0	1.23	-178.9	8.245	as above
15:20	4.0	18.4	6.34	543.0	0.44	-192.7	8.970	flow rate slowed
15:25	6.0	19.8	6.35	664.0	0.33	-194.0	9.070	
15:30	7.5	20.1	6.34	565.0	0.34	-192.2	9.135	
15:35	8.0	20.4	6.34	572.0	0.32	-191.0	9.090	
15:42	8.5	21.1	6.34	583.0	0.29	-187.2	8.990	c02 bottle empty, pumping stopped.
15:50	8.5	19.9	6.31	564.0	0.48	-1792.0	8.722	bottle swapped
15:55	9.0	18.2	6.32	403.0	0.28	-188.6	8.990	
16:00	9.5	18.9	6.32	403.0	0.23	-199.5	9.110	
16:05	10.0	19.4	6.32	556.0	0.19	-201.6	9.180	
14:10	10.5	19.5	6.31	555.0	0.22	-200.2	9.155	
14:15	11.0	19.2	6.32	551.0	0.21	-200.0	9.210	Low turbidity, pale brown colour, organics odour, no sediment, no sheen
								sample taken, not stabilising

Field QA Checks:	
Air bubbles in vials or violent reactions?	
Decontamination as per GHD procedure?	
Was sampling equipment pre-cleaned?	
COC updated?	

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

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW131

Job Information		Sampling Information		Monitoring Well Information				
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	3.605 m bTOC	**Time SWL Measured:**	02:57 PM	
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	7.080 m bTOC	**Logic Check:**	Yes	
Proj. No.:	12626622	**Sample Depth:**	m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes	
Site:	403 lands / Mary Creek	**WQuality Meter Type:**	YSI	**NAPL Depth:**	- m bTOC	**Gatic or Stick Up?**	Stick Up	
Sampler:	ES / AK	**Flow Cell Used?**	Yes	**Screened Interval From:**	4.37 to 7.37 m bTOC			
Date:	01/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	3.51 m bTOC			
Round:	April 2025 OMP	**Field Filtered?**	No	**Historical ID (if applicable):**	MC_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*	
15:08	0.5	19.0	5.35	28539.0	0.32	-177.0	3.620	Clear, strong hydrogen sulfide odour, no sheen. Good recharge.
15:11	1.0	18.8	5.33	29019.0	0.53	-188.2	3.620	
15:14	1.5	19.0	5.38	28138.0	0.46	-188.9	3.620	Clear, strong hydrogen sulfide odour, no sheen. Good recharge.
15:17	2.0	19.1	5.41	27081.0	0.38	-188.7	3.620	
15:20	2.5	19.1	5.42	26651.0	0.30	-191.2	3.620	Clear, strong hydrogen sulfide odour, no sheen. Good recharge.
15:23	3.0	19.1	5.43	26355.0	0.22	-193.0	3.620	
15:26	3.5	19.1	5.44	26150.0	0.19	-194.5	3.620	Clear, strong hydrogen sulfide odour, no sheen. Good recharge.
15:29	4.0	19.0	5.43	25875.0	0.25	-197.5	3.620	
15:33	4.5	19.2	5.45	25790.0	0.13	-199.4	3.620	Clear, strong hydrogen sulfide odour, no sheen. Good recharge.
15:36	5.0	19.2	5.46	25611.0	0.11	-200.3	3.620	
15:39	5.5	19.2	5.46	25477.0	0.10	-200.9	3.620	Clear, strong hydrogen sulfide odour, no sheen. Good recharge.
15:42	6.0	19.2	5.46	25444.0	0.10	-200.7	3.620	
15:45	6.5	19.2	5.47	25295.0	0.11	-201.5	3.620	Clear, strong hydrogen sulfide odour, no sheen. Good recharge.
								Parameters stable, samples collected.

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

Lab QC collected? Y

If duplicate collected, put ID *(e.g. QC101, QC201)*: QC134, QC234

Dup 1 Name: 0021_QC134_250401

Dup 2 Name: 0021_QC234_250401

Purging and Sampling Record

Well ID: 0021_MW132

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	4.550 m bTOC	**Time SWL Measured:**	04:06 PM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	12.025 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	11.5 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	403 lands / Mary Creek	**WQuality Meter Type:**	YSI	**NAPL Depth:**	- m bTOC	**Gatic or Stick Up?**	Stick Up
Sampler:	ES / AK	**Flow Cell Used?**	Yes	**Screened Interval From:**	6.18 to 12.18 m bTOC		
Date:	01/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	4.53 m bTOC		
Round:	April 2025 OMP	**Field Filtered?**	No	**Historical ID (if applicable):**	MC_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: 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*	
16:16	0.5	17.2	5.35	565.0	1.38	-71.8	4.620	Colourless, cloudy, no odour or sheen.
16:19	1.0	17.2	5.39	487.5	1.02	-68.0	4.685	
16:22	1.5	17.2	5.43	440.6	0.92	-65.5	4.710	Slight pale brown, cloudy, no odour or sheen.
16:25	2.0	17.2	5.43	436.0	0.92	-63.4	4.720	
16:28	2.5	17.2	5.43	434.0	0.92	-62.2	4.725	Slight pale brown, cloudy, no odour or sheen.
16:31	3.0	17.2	5.43	434.0	0.91	-61.0	4.730	
16:34	3.5	17.3	5.43	432.8	0.90	-58.6	4.740	Slight pale brown, cloudy, no odour or sheen.
16:37	4.0	17.3	5.44	431.5	0.87	-56.5	4.745	Slight pale brown, cloudy, no odour or sheen.
								Parameters stable, samples collected.

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

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW133

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	4.675 m bTOC	**Time SWL Measured:**	10:55 AM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	10.475 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	10 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	403 lands / Mary Creek	**WQuality Meter Type:**	YSI	**NAPL Depth:**	- m bTOC	**Gatic or Stick Up?**	Stick Up
Sampler:	ES / AT / LF	**Flow Cell Used?**	Yes	**Screened Interval From:**	4.78 to 10.78 m bTOC		
Date:	02/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	4.74 m bTOC		
Round:	April 2025 OMP	**Field Filtered?**	No	**Historical ID (if applicable):**	MC_MW04		

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*	
11:01	0.5	17.7	4.80	371.9	3.31	153.7	4.740	Pightish brown, low turbidity, no odour, no sheen, alright recharge
11:06	1.0	17.7	4.68	373.2	3.12	169.0	4.760	Medium turbidity
11:10	2.0	17.8	4.60	376.3	3.08	176.0	4.760	
11:14	3.0	17.8	4.53	378.1	3.13	179.9	4.770	Pale brown, medium turbidity, no odour or sheen, good recharge.
11:19	4.0	17.9	4.50	380.3	3.16	180.6	4.770	
11:24	5.0	18.1	4.42	385.5	3.17	183..8	4.780	Pale brown, medium turbidity, no odour or sheen, good recharge.
11:30	6.5	18.2	4.40	392.3	3.21	185.3	4.780	
11:35	7.5	18.2	4.40	395.4	2.38	171.0	4.780	
11:40	8.5	18.2	4.40	397.2	1.99	160.4	4.780	Pale brown, mostly clear, no odour or sheen, good recharge.
11:45	9.0	18.2	4.40	396.7	1.72	147.0	4.780	
11:50	9.5	18.2	4.40	397.1	1.47	173.9	4.780	Clear, no odour or sheen, good recharge.
								Parameters mostly stable, DO and redox not stable, sampled.

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

Lab QC collected? Y

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW134

Job Information		*Sampling Information*		*Monitoring Well Information*			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	5.340 m bTOC	**Time SWL Measured:**	11:34 AM
Project:	JBRF / Creswell OMP	**Sample Method:**	Micropurge	**Well Depth:**	7.740 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	6 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF / Telegraph Creek	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Stick Up
Sampler:	JNM	**Flow Cell Used?**	Yes	**Screened Interval From:**	4.95 to 7.95 m bTOC		0.76
Date:	02/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	5.53 m bTOC		
Round:	April 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: 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*	
11:40	1.0	20.3	3.87	236.5	2.84	234.6	5.340	pale brown, turbid, some sediment, no sheen, no odour
11:45	3.0	20.1	3.81	235.5	2.22	233.2	5.445	as above
11:50	5.0	20.0	3.81	232.2	2.18	230.2	5.495	as above
11:55	7.0	19.9	3.79	230.5	2.12	229.5	5.505	as above
08:14		19.8	4.01	258.3	1.25	202.9	5.340	Resampled 8/4/25 as samples lost.

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

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW135

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	12.280 m bTOC	**Time SWL Measured:**	02:20 PM
Project:	JBRF / Creswell OMP	**Sample Method:**	Micropurge	**Well Depth:**	40.900 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	38.9 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	BNP / Lake McKenzie	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Stick Up
Sampler:	AK	**Flow Cell Used?**	Yes	**Screened Interval From:**	31.87 to 40.87 m bTOC		
Date:	04/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	11.86 m bTOC		
Round:	April 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: 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*	
16:18	0.5	18.5	5.48	273.0	1.20	46.8	12.690	Cloudy pale orange, slight h2s egg odour, no sheen
16:22	1.0	18.5	5.47	274.1	1.14	47.2	12.700	
16:26	1.5	18.3	5.19	282.2	1.35	51.9	12.720	
16:30	2.0	18.3	5.10	286.7	1.32	53.0	12.750	
16:34	2.5	18.2	5.01	294.1	1.46	55.7	12.800	
16:38	3.0	18.2	4.99	307.3	1.46	57.2	12.820	
16:42	3.5	18.1	4.89	317.1	1.22	59.6	12.910	
16:45	4.0	17.8	4.86	305.5	1.14	61.3	13.270	
16:49	4.5	17.0	4.86	305.0	1.10	62.0	13.340	
16:53	5.0	17.7	5.02	289.1	1.09	68.5	13.450	
16:57	5.5	17.7	5.03	288.2	1.13	68.3	13.560	Cloudy orange, opaque, no sheen
17:00	6.0	17.7	5.13	280.2	1.13	68.8	13.630	
17:03	6.5	17.7	5.21	274.7	1.05	67.1	13.740	
17:06	7.0	17.7	5.28	272.6	0.99	67.4	13.850	
17:09	7.5	17.7	5.27	272.2	0.96	67.8	13.970	
17:12	8.0	17.7	5.28	272.1	0.93	67.0	14.040	Cloudy, orange, opaque, no sheen
								Parameters stable, samples collected

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

Lab QC collected? Y

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW136

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	6.370 m bTOC	**Time SWL Measured:**	02:40 PM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	26.660 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	25 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	BNP / Lake McKenzie	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Stick Up
Sampler:	AK	**Flow Cell Used?**	Yes	**Screened Interval From:**	20.74 to 26.74 m bTOC		
Date:	04/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	5.83 m bTOC		
Round:	April 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: 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*	
14:56	0.5	18.1	4.95	232.2	0.41	-40.2	6.470	cloudy, slightly opaque, no odour or sheen, no sediment
14:58	1.0	18.1	4.94	231.8	0.31	-48.9	6.490	
15:00	1.5	18.1	4.93	231.1	0.19	-59.3	6.520	
15:02	2.0	18.1	4.94	231.0	0.14	-62.9	6.530	
15:04	2.5	18.1	4.94	228.4	0.09	-68.6	6.550	
15:06	3.0	18.1	4.94	228.1	0.06	-71.3	6.570	cloudy, slightly opaque, no odour or sheen, no sediment, slowed pump
15:08	3.5	18.0	4.94	227.7	0.04	-74.5	6.580	
15:10	4.0	18.1	4.94	227.4	0.01	-76.5	6.585	slowed pump, good recharge
15:12	4.5	18.1	4.94	227.6	0.01	-78.7	6.590	
15:14	5.0	18.1	4.94	227.7	0.01	-79.8	6.600	
15:16	5.5	18.1	4.94	227.6	0.01	-80.8	6.595	
15:18	6.0	18.2	4.94	228.1	0.01	-82.9	6.585	Cloudy, slightly opaque, no odour or sheen, no sediment, slowed pump
								parameters stable, samples collected

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

Lab QC collected? Y

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW137

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	5.600 m bTOC	**Time SWL Measured:**	01:13 PM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	11.625 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	9.5 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	BNP / Lake McKenzie	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Stick Up
Sampler:	AK	**Flow Cell Used?**	Yes	**Screened Interval From:**	5.80 to 11.80 m bTOC		
Date:	04/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	4.87 m bTOC		
Round:	April 2025 OMP	**Field Filtered?**	No	**Historical ID (if applicable):**	LM_MW03C		

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*	
13:28	0.5	18.0	4.25	734.0	0.93	8.0	5.780	clear, no odour or sheen or sediment
13:31	1.0	18.0	4.25	743.0	0.88	7.1	5.820	slight h2s egg odour, slowed pump
13:35	1.5	18.1	4.25	753.0	0.73	6.3	5.835	
13:39	2.0	18.1	4.25	753.0	0.66	7.0	5.850	
13:43	2.5	18.1	4.25	752.0	0.65	7.1	5.855	
13:46	3.0	18.2	4.29	739.0	0.62	4.7	5.855	
13:49	3.5	18.3	4.27	728.0	0.60	3.0	5.860	clear, no sediment or sheen, h2s egg odour, recharge good
13:53	4.0	18.3	4.27	709.0	0.56	1.5	5.865	slowed pump
13:57	4.5	18.4	4.27	706.0	0.56	2.1	5.865	
14:01	5.0	18.4	4.27	701.0	0.57	3.5	5.860	Clear, no sediment or sheen, hydrogen sulfide odour, recharge good
								recharge stable, parameters stable, samples taken

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 ID *(e.g. QC101, QC201)*: — Dup 1 Name:

Lab QC collected? Y — Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW138

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	6.875 m bTOC	**Time SWL Measured:**	12:40 PM
Project:	JBRF / Creswell OMP	**Sample Method:**	Micropurge	**Well Depth:**	41.155 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	35 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	BNP / Lake Windermere	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Stick Up
Sampler:	AT / JM	**Flow Cell Used?**	Yes	**Screened Interval From:**	31.94 to 40.94 m bTOC		
Date:	03/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	6.24 m bTOC		
Round:	April 2025 OMP	**Field Filtered?**	No	**Historical ID (if applicable):**	LW_MW02A		

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*	
02:45								
02:50	0.5	18.3	6.29	1080.0	0.61	-140.7	7.600	clear, low turbidity, trace white sediment, sulfur odour
02:55	1.0	18.9	5.48	1115.0	0.90	-113.9	7.690	clear, low turbidity, trace white sediment, sulfur odour
03:00	1.5	18.9	5.20	1138.0	0.71	-91.7	7.720	clear, low turbidity, trace white sediment, sulfur odour
03:03	2.0	18.7	5.91	1260.0	0.39	-102.4	7.730	clear, low turbidity, trace white sediment, sulfur odour
03:08	2.5	18.5	5.96	1297.0	0.30	-106.7	7.750	clear, low turbidity, trace white sediment, sulfur odour
03:12	3.0	18.4	5.97	1291.0	0.30	-108.3	7.760	clear, low turbidity, trace white sediment, sulfur odour
03:16	3.5	18.4	5.96	1295.0	0.29	-108.7	7.790	Clear, low turbidity, trace white sediment, sulfur odour.
								Sampled.

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

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW139

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	5.775 m bTOC	**Time SWL Measured:**	11:40 AM
Project:	JBRF / Creswell OMP	**Sample Method:**	Micropurge	**Well Depth:**	21.150 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	18 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	BNP / Lake Windermere	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Stick Up
Sampler:	AT / JM	**Flow Cell Used?**	Yes	**Screened Interval From:**	15.07 to 21.07 m bTOC		
Date:	03/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	5.3 m bTOC		
Round:	April 2025 OMP	**Field Filtered?**	No	**Historical ID (if applicable):**	LW_MW02B		

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*	
11:45	0.5	18.7	5.77	582.0	7.26	-133.9	5.780	clear, low turbidity, no sediment, no odour
11:50	2.0	18.6	5.80	584.0	0.78	-135.9	5.780	clear, low turbidity, no sediment, no odour
11:55	3.0	18.6	5.78	585.0	0.44	-133.5	5.785	clear, low turbidity, no sediment, no odour
12:05	4.0	18.0	5.76	583.0	0.22	-132.8	5.795	clear, low turbidity, no sediment, no odour
12:10	4.5	18.0	5.75	580.0	0.21	-131.9	5.790	clear, low turbidity, no sediment, no odour
12:15	5.0	18.0	5.73	578.0	0.20	-130.1	5.795	Clear, low turbidity, no sediment, no odour, sample taken

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 ID *(e.g. QC101, QC201)*: QC108, QC208 — Dup 1 Name: 0021_QC108_250403

Lab QC collected? Y — Dup 2 Name: 0021_QC208_250403

Purging and Sampling Record

Well ID: 0021_MW140

Job Information		*Sampling Information*		*Monitoring Well Information*			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	2.565 m bTOC	**Time SWL Measured:**	12:40 PM
Project:	JBRF / Creswell OMP	**Sample Method:**	Micropurge	**Well Depth:**	12.625 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	8 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	BNP / Lake Windermere	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Stick Up
Sampler:	AT / JM	**Flow Cell Used?**	Yes	**Screened Interval From:**	6.54 to 12.54 m bTOC		
Date:	03/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	3.06 m bTOC		
Round:	April 2025 OMP	**Field Filtered?**	No	**Historical ID (if applicable):**	LW_MW02C		

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*	
12:55	0.5	16.7	5.07	484.2	0.22	36.9	3.073	clear, low turbidity, no sediment, no odour
01:00	1.0	18.9	5.04	494.0	0.23	40.9	3.049	clear, low turbidity, no sediment, no odour
01:05	1.5	18.7	5.05	495.1	0.20	43.5	3.028	clear, low turbidity, no sediment, no odour
01:17	2.0	18.7	5.12	498.8	0.16	42.6	3.071	clear, low turbidity, no sediment, no odour, changed to 2CPM
01:25	2.5	18.8	5.14	508.0	0.14	40.0	3.094	clear, low turbidity, no sediment, no odour
01:30	3.0	18.6	5.14	511.0	0.13	38.5	3.072	clear, low turbidity, no sediment, no odour
01:35	3.5	18.6	5.14	512.0	0.13	37.7	3.098	Clear, low turbidity, no sediment, no odour, sample taken

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

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW150

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	0.071 m bTOC	**Time SWL Measured:**	08:23 AM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	5.011 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	4.7 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF / AEC A	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Gatic
Sampler:	AD	**Flow Cell Used?**	Yes	**Screened Interval From:**	3.04 to 5.04 m bTOC		
Date:	04/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	0.27 m bTOC		
Round:	April 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*	
08:32	0.5	21.1	4.42	264.4	1.96	211.0	0.196	Clear, no odour, no sheen, no sediment
08:35	1.0	21.1	4.36	270.3	1.29	213.9	0.234	
08:38	1.5	21.1	4.25	279.7	0.59	218.0	0.251	
08:40	2.0	21.1	4.19	284.0	0.35	219.9	0.263	
08:42	2.5	21.1	4.17	284.7	0.21	222.3	0.258	Great recharge
08:45	3.0	21.1	4.15	284.7	0.16	224.2	0.264	
08:47	3.5	21.1	4.13	284.3	0.15	225.8	0.262	
08:50	4.0	21.0	4.12	284.1	0.12	227.2	0.264	
08:52	4.5	21.0	4.11	283.6	0.14	228.1	0.270	
08:54	5.0	21.0	4.12	282.7	0.13	227.9	0.272	Clear, no odour, no sheen, no sediment
								Parameters stable, samples collected

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: Gatic flooded, well cap secure, dewatered before opening well cap, SWL rose from ~0.25mbtoc after removing well cap, data logger in well

Sample Summary

Samples collected? Yes

Lab QC collected? Y

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW151

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	0.641 m bTOC	**Time SWL Measured:**	09:16 AM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	3.031 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	2.7 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF / AEC A	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Gatic
Sampler:	AD	**Flow Cell Used?**	Yes	**Screened Interval From:**	2.08 to 3.08 m bTOC		
Date:	04/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	1.205 m bTOC		
Round:	April 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*	
09:14	0.4	21.3	4.25	331.1	1.78	252.5	0.951	Clear, no odour, no sheen, no sediment
09:17	0.8	21.3	4.24	330.0	2.23	275.0	1.100	
09:19	1.2	21.2	4.25	329.0	2.25	300.4	1.275	Pump flow rate reduced to slowest setting
09:22	1.6	21.2	4.25	328.1	2.17	319.0	1.388	
09:25	2.0	21.2	4.25	334.9	2.31	335.2	1.589	
09:28	2.4	21.1	4.24	327.6	2.27	347.3	1.758	
09:31	2.8	21.1	4.25	327.7	2.27	327.8	1.913	
09:34	3.2	21.1	4.25	327.4	1.93	351.5	2.076	
09:37	3.6	21.1	4.25	327.3	2.06	361.7	2.140	Moderate recharge
09:40	4.0	21.1	4.24	328.4	1.97	359.5	2.231	
09:43	4.4	21.2	4.24	329.3	1.23	350.8	2.311	
09:46	4.8	21.1	4.23	329.8	1.18	344.0	1.404	
09:49	5.2	21.2	4.23	330.1	1.08	341.8	1.487	Clear, no odour, no sheen, no sediment
								Parameters stable, >1 well volume purged, samples collected

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: Gatic broken

Sample Summary

Samples collected? Yes

Lab QC collected? Y

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW152

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	0.569 m bTOC	**Time SWL Measured:**	10:00 AM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	1.939 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	1.7 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF / AEC A	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	
Sampler:	AD	**Flow Cell Used?**	Yes	**Screened Interval From:**	1.05 to 2.05 m bTOC		
Date:	04/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	0.24 m bTOC		
Round:	April 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*	
10:06	0.3	21.1	4.68	271.0	0.70	292.1	0.829	Pale yellow tinge, clear, no odour, no sheen, no sediment
10:08	0.6	21.1	4.68	270.0	0.50	290.0	0.949	Pump flow rate reduced to slowest setting
10:10	0.9	21.2	4.67	269.7	0.46	287.3	1.021	
10:12	1.2	21.1	4.68	269.2	0.44	285.6	1.061	Good recharge
10:14	1.5	21.1	4.68	267.6	0.44	284.5	1.129	
10:16	1.8	21.0	4.66	264.7	0.48	283.4	1.180	Pale yellow tinge, clear, no odour, no sheen, no sediment
								Parameters stable, samples collected
08:08							0.402	8/04/2025, recollect sample with bailer as it was lost
08:10	1.0	20.9	4.34	286.3	1.04	283.5	0.670	Pale yellow tinge, clear, no odour, no sheen, no sediment
								Samples collected, parameters similar to 4/04

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

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW153

Job Information		Sampling Information		Monitoring Well Information				
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	0.740 m bTOC	**Time SWL Measured:**	08:20 AM	
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	4.850 m bTOC	**Logic Check:**	Yes	
Proj. No.:	12626622	**Sample Depth:**	4.5 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes	
Site:	JBRF / AEC A	**WQuality Meter Type:**	YSI	**NAPL Depth:**	- m bTOC	**Gatic or Stick Up?**	Gatic	
Sampler:	ES	**Flow Cell Used?**	Yes	**Screened Interval From:**	2.88 to 4.88 m bTOC			
Date:	04/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	1.14 m bTOC			
Round:	April 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*	
08:27	0.5	18.3	4.09	331.7	2.33	49.0	0.960	Clear, no odour or sheen. SWL dropping, not recharging
08:32	1.0	18.4	4.12	333.8	0.56	32.4	1.040	
08:37	1.5	18.5	4.14	335.6	0.37	24.7	1.060	Clear, no odour or sheen, recharging.
08:42	2.0	18.6	4.13	336.8	0.34	21.5	1.080	
08:46	2.5	18.6	4.11	337.0	0.30	20.1	1.080	Clear, no odour or sheen, recharging.
08:50	3.0	18.6	4.11	338.0	0.27	17.3	1.090	
08:54	3.5	18.7	4.11	338.6	0.25	15.6	1.090	Stable SWL
08:58	4.0	18.8	4.10	338.6	0.25	13.2	1.090	Clear, no odour or sheen.
								Parameters stable, samples collected.

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: Diver data logger found in well.

Sample Summary

Samples collected? Yes — If duplicate collected, put ID *(e.g. QC101, QC201)*: QC140, QC240 — Dup 1 Name: 0021_QC140_250404

Lab QC collected? Y — Dup 2 Name: 0021_QC240_250404

Purging and Sampling Record

Well ID: 0021_MW154

Job Information		*Sampling Information*		*Monitoring Well Information*			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	0.800 m bTOC	**Time SWL Measured:**	09:06 AM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	1.850 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	1.7 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF / AEC A	**WQuality Meter Type:**	YSI	**NAPL Depth:**	- m bTOC	**Gatic or Stick Up?**	Gatic
Sampler:	ES	**Flow Cell Used?**	Yes	**Screened Interval From:**	2.16 to 3.16 m bTOC		
Date:	04/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	1.16 m bTOC		
Round:	April 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*	
09:13	0.5	19.3	4.08	387.4	2.85	295.8	1.380	Clear, no odour or sheen, SWL dropping
09:16							1.490	Stopped pump, did not want to purge dry.
								Sampled.

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

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW155

Job Information		Sampling Information		Monitoring Well Information				
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	0.360 m bTOC	**Time SWL Measured:**	09:55 AM	
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	2.040 m bTOC	**Logic Check:**	Yes	
Proj. No.:	12626622	**Sample Depth:**	1.8 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes	
Site:	JBRF / AEC A	**WQuality Meter Type:**	YSI	**NAPL Depth:**	- m bTOC	**Gatic or Stick Up?**	Gatic	
Sampler:	ES	**Flow Cell Used?**	Yes	**Screened Interval From:**	0.84 to 2.09 m bTOC			
Date:	04/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	1.22 m bTOC			
Round:	April 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*	
09:29	0.5	19.0	6.03	675.0	1.29	119.7	0.560	Pale brown, clear, no odour or sheen. SWL dropping
09:33	1.0	18.9	6.13	721.0	0.45	85.3	0.730	
09:37	1.5	18.9	6.19	760.0	0.49	64.3	0.900	Pale brown, clear, no odour or sheen. SWL dropping
09:41	2.0	18.9	6.22	764.0	0.39	55.6	1.080	Reduced pump speed, SWL dropping
09:46	2.5	18.9	6.20	769.0	0.33	45.1	1.230	Pale brown, clear, no odour or sheen. SWL dropping
09:50	3.0	18.8	6.21	750.0	0.28	35.6	1.300	
09:54	3.5	18.8	6.07	732.0	0.25	11.4	1.370	Pale brown, clear, no odour or sheen. SWL dropping
09:58	4.0	18.8	6.14	752.0	0.41	1.0	1.470	
10:02	4.5	18.8	6.17	770.0	0.33	-17.5	1.580	Pale brown, clear, no odour or sheen. SWL dropping
10:06	5.0	18.8	6.18	755.0	0.29	-40.0	1.680	Pale brown, clear, no odour or sheen.
								Not stabilised, sampled due to consistent SWL dropping.
								temp, pH, EC, DO are mostly stable.

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

Lab QC collected? Y

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW160

Job Information		Sampling Information		Monitoring Well Information				
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	2.586 m bTOC	**Time SWL Measured:**	08:57 AM	
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	6.881 m bTOC	**Logic Check:**	Yes	
Proj. No.:	12626622	**Sample Depth:**	5.9 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes	
Site:	JBRF	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Stick Up	
Sampler:	AD	**Flow Cell Used?**	Yes	**Screened Interval From:**	3.94 to 6.94 m bTOC			
Date:	02/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	2.88 m bTOC			
Round:	April 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*	
09:05	0.5	20.6	4.37	347.7	0.37	177.7	2.651	Pale yellow tinge, clear, no odour, no sheen, no sediment
09:07	1.0	20.6	4.37	348.2	0.26	163.8	2.656	
09:11	2.0	21.0	4.35	352.0	0.17	144.6	2.663	Great recharge, pump flow rate increased
09:15	3.0	21.2	4.35	352.7	0.14	134.6	2.667	
09:20	4.0	21.2	4.33	355.3	0.11	128.8	2.671	
09:24	5.0	21.3	4.32	356.9	0.10	125.2	2.677	
09:28	6.0	21.3	4.29	357.2	0.09	122.0	2.681	
09:32	7.0	21.4	4.28	359.0	0.10	119.2	2.683	Pale yellow tinge, clear, no odour, no sheen, no sediment, great recharge
								Parameters stable, samples collected

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

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*: QC254

Dup 1 Name: 0021_QC254_250402

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW163

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	1.801 m bTOC	**Time SWL Measured:**	10:34 AM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	3.646 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	3.3 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Stick Up
Sampler:	AD	**Flow Cell Used?**	Yes	**Screened Interval From:**	1.76 to 3.76 m bTOC		
Date:	02/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	2.54 m bTOC		
Round:	April 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*	
10:41	0.3	20.3	4.17	701.0	2.73	162.9	1.951	Pale orange tinge, clear, no odour, no sheen, no sediment
10:43	0.6	20.3	4.20	605.0	3.09	162.9	1.951	
10:45	0.9	20.4	4.22	548.0	3.76	164.2	1.962	Clear, no odour, no sheen, no sediment
10:48	1.2	20.4	4.27	564.6	3.95	163.9	1.978	
10:50	1.5	20.4	4.29	423.7	4.58	164.8	1.990	
10:52	1.8	20.5	4.30	403.3	4.62	166.6	1.990	Great recharge
10:54	2.1	20.5	4.31	398.3	4.71	168.3	1.992	
10:56	2.4	20.5	4.32	393.3	4.83	169.9	1.994	Clear, no odour, no sheen, no sediment
								Parameters stable, samples collected

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

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

Purging and Sampling Record

Well ID: 0021_MW164

Job Information		Sampling Information		Monitoring Well Information			
Client:	Department of Defence	**Purge Method:**	Low flow	**SWL:**	0.260 m bTOC	**Time SWL Measured:**	11:29 AM
Project:	JBRF / Creswell OMP	**Sample Method:**	Peri pump	**Well Depth:**	2.320 m bTOC	**Logic Check:**	Yes
Proj. No.:	12626622	**Sample Depth:**	2 m bTOC	**NAPL Check:**	Absent	**Well Cap Secure?**	Yes
Site:	JBRF	**WQuality Meter Type:**	YSI	**NAPL Depth:**	m bTOC	**Gatic or Stick Up?**	Gatic
Sampler:	AK	**Flow Cell Used?**	Yes	**Screened Interval From:**	0.94 to 2.94 m bTOC		
Date:	02/04/2025	**WLevel Meter Type:**	Interface Probe	**October 2024 OMP SWL:**	0.68 m bTOC		
Round:	April 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*	
11:40	0.5	21.5	5.47	524.0	0.49	-84.3	0.405	cloudy yellow, opaque, no sheen, no odour, slowed pump
11:43	1.0	21.7	5.48	527.0	0.70	-101.8		
11:46	1.5	21.7	5.48	527.0	0.67	-102.0	0.485	
11:49	2.0	21.8	5.50	523.0	0.38	-107.0		
11:52	2.5	21.9	5.49	523.0	0.27	-108.0	0.480	clear, slight yellow tinge, slight h2s egg odour, no sheen
11:55	3.0	21.8	5.49	522.0	0.19	-109.6		
11:58	3.5	21.8	5.49	522.0	0.11	-112.2	0.490	
12:01	4.0	21.7	5.49	521.0	0.09	-113.9		
12:04	4.5	21.8	5.49	521.0	0.07	-114.5		
12:07	5.0	21.8	5.48	518.0	0.02	-115.5	0.495	clear, slight yellow tinge, slight h2s egg odour, no sheen
12:10	5.5	21.8	5.49	515.0	0.01	-115.8	0.495	clear, slight yellow tinge, slight h2s egg odour, no sheen
								parameters mostly stable, recharge stable, samples taken

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

Lab QC collected? N

If duplicate collected, put ID *(e.g. QC101, QC201)*:

Dup 1 Name:

Dup 2 Name:

SURFACE WATER AND SEDIMENT SAMPLING RECORD

PROJECT NO.:	12626622	**SURFACE WATER ID:**	0020_SW004
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	0020_SD018
CLIENT:	Department of Defence	**DATE:**	31/03/2025 **TIME:** 11:30:00 AM
SITE:	HMAS Creswell / Captains Lagoon	**LOGGED BY:**	JM /AT

COORDINATES/GPS *(if applicable)* 291407.3, 6110460.47, see Figure 4B. Historical ID: CL_SW01 (SW), CL_SD01 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** Grab **SEDIMENT:** Grab

DETAILED SAMPLE LOCATION DESCRIPTION Sampled from captains lagoon bank

ENVIRONMENTAL OBSERVATIONS

WEATHER	Rainy overcast
VEGETATION	native bush
SLOPE	steep slope to captains
EROSION	bank erosion was present

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	brown colour, high turbidity, no odour or sheen
SEDIMENT (describe as soil)	fine to medium grained sand

FIELD MEASUREMENTS

TEMPERATURE (°C)	20.4
DO (mg/L)	7.57
DO (%S)	
CONDUCTIVITY (µS/cm)	40590.0
pH (pH units)	7.94
REDOX (mV)	27.1
TDS (mg/L)	28923.00

HYDROLOGICAL DATA

FLOW MEASUREMENT	fast steady flow
CROSS SECTION WIDTH (m)	20m
DEPTH (m)	1.5
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_SW004_250331				Yes
0020_SD018_250331				

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:**	31/03/2025 **TIME:** 11:00:00 AM
SITE:	HMAS Creswell / Captains Lagoon	**LOGGED BY:**	JM /AT

COORDINATES/GPS *(if applicable)* 291429.04, 6110332.85, see Figure 4B. Historical ID: CL_SW02 (SW), CL_SD02 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** Grab **SEDIMENT:** Grab

DETAILED SAMPLE LOCATION DESCRIPTION Sampled from captains lagoon bank

ENVIRONMENTAL OBSERVATIONS

WEATHER	Rainy overcast
VEGETATION	native bush
SLOPE	steep slope to captains
EROSION	bank erosion present

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	brown colour, high turbidity, no odour or sheen
SEDIMENT (describe as soil)	fine to medium grained sand

FIELD MEASUREMENTS

TEMPERATURE (°C)	20.4
DO (mg/L)	7.50
DO (%S)	
CONDUCTIVITY (µS/cm)	40238.0
pH (pH units)	7.94
REDOX (mV)	29.3
TDS (mg/L)	28690.00

HYDROLOGICAL DATA

FLOW MEASUREMENT	fast steady flow
CROSS SECTION WIDTH (m)	20m
DEPTH (m)	1.5
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_SW005_250331				Yes
0020_SD019_250331				

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:**	31/03/2025 **TIME:** 9:00:00 AM
SITE:	BNP / Captains Lagoon	**LOGGED BY:**	JM

COORDINATES/GPS *(if applicable)* 291680.09, 6109787.76, see Figure 4E. Historical ID: CL_SW07 (SW), CL_SD07 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** Grab **SEDIMENT:** Grab

DETAILED SAMPLE LOCATION DESCRIPTION Side of creek, near where kayaks are launched.

ENVIRONMENTAL OBSERVATIONS

WEATHER	rain, overcast, windy
VEGETATION	reeds on banks, some algae in water
SLOPE	shallow grade away from water
EROSION	some minor erosion of banks

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	light brown, turbid, no sheen, no odour, some foam on surface
SEDIMENT (describe as soil)	silty sand, dark brown, organic matter, decaying organics odour, some gravel, fine to coarse sand.

FIELD MEASUREMENTS

TEMPERATURE (°C)	20.0
DO (mg/L)	6.67
DO (%S)	
CONDUCTIVITY (µS/cm)	40165.0
pH (pH units)	7.90
REDOX (mV)	76.5
TDS (mg/L)	27155.00

HYDROLOGICAL DATA

FLOW MEASUREMENT	flowing, surges noted in water
CROSS SECTION WIDTH (m)	30
DEPTH (m)	>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_SW010_250331				
0020_SD024_250331				

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:**	0020_SD025
CLIENT:	Department of Defence	**DATE:**	02/04/2025 **TIME:** 2:08:00 PM
SITE:	BNP / Captains Lagoon	**LOGGED BY:**	ES / AK

COORDINATES/GPS *(if applicable)* 291346.1, 6109113.37, see Figure 4E. Historical ID: FC_SW05 (SW), CL_SD08 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** Grab **SEDIMENT:** Trowel

DETAILED SAMPLE LOCATION DESCRIPTION Downstream 10m from lardpge culvert oulet under road

ENVIRONMENTAL OBSERVATIONS

WEATHER	Sunny
VEGETATION	Trees, low native bush scrub, fallen over trees and leaf debris
SLOPE	Steep from road, overwise surrounds very slight slope
EROSION	None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Clear, no odour or sheen
SEDIMENT (describe as soil)	Gravelly SAND, coarse grained, pale brown, gravel is subrounded to subangular, poorly graded, no staining or odour

FIELD MEASUREMENTS

TEMPERATURE (°C)	17.1
DO (mg/L)	6.18
DO (%S)	64.20
CONDUCTIVITY (µS/cm)	212.1
pH (pH units)	5.18
REDOX (mV)	162.3
TDS (mg/L)	162.50

HYDROLOGICAL DATA

FLOW MEASUREMENT	Moderate, approx 0.1 m/s at fastest point
CROSS SECTION WIDTH (m)	1.5
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?
0020_SW011_250402				
0020_SD025_250402				

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:**	0020_SD026
CLIENT:	Department of Defence	**DATE:**	31/03/2025 **TIME:** 12:00:00 PM
SITE:	HMAS Creswell / Captains Lagoon	**LOGGED BY:**	JM /AT

COORDINATES/GPS *(if applicable)* 291433.74, 6110572.47, see Figure 4B. Historical ID: CL_SW12 (SW), CL_SD12 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** Grab **SEDIMENT:** Grab

DETAILED SAMPLE LOCATION DESCRIPTION Sampled from captains lagoon entrance to jervis bay

ENVIRONMENTAL OBSERVATIONS

WEATHER	Rainy overcast
VEGETATION	dune grasses
SLOPE	Gradual slope, towards jervis bay
EROSION	tidal sand movement

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	brown colour, high turbidity, no odour, no sheen
SEDIMENT (describe as soil)	fine grained sand

FIELD MEASUREMENTS

TEMPERATURE (°C)	20.4
DO (mg/L)	7.90
DO (%S)	
CONDUCTIVITY (µS/cm)	42121.0
pH (pH units)	7.98
REDOX (mV)	57.2
TDS (mg/L)	30020.00

HYDROLOGICAL DATA

FLOW MEASUREMENT	turbulent
CROSS SECTION WIDTH (m)	10m
DEPTH (m)	1.5
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_SW012_250331				
0020_SD026_250331	QC101, QC201	0020_QC101_250331	0020_QC201_250331	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:**	31/03/2025 **TIME:** 11:52:00 AM
SITE:	HMAS Creswell / AEC E	**LOGGED BY:**	AD/AK

COORDINATES/GPS *(if applicable)* 290413.7, 6110320.66, see Figure 4B. Historical ID: E_IRRIGATION_03 (SW)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** Grab **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION Next to outlet pipe, as close to outlet as possible

ENVIRONMENTAL OBSERVATIONS

WEATHER	Rain
VEGETATION	Grass and shrubs on bank
SLOPE	Shallow to flat
EROSION	None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Pale-yellow tinge, clear, no odour, no sheen
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	22.2
DO (mg/L)	6.98
DO (%S)	68.80
CONDUCTIVITY (µS/cm)	372.3
pH (pH units)	7.01
REDOX (mV)	67.8
TDS (mg/L)	255.45

HYDROLOGICAL DATA

FLOW MEASUREMENT	NA (Treatment Pond)
CROSS SECTION WIDTH (m)	~50 (Treatment Pond)
DEPTH (m)	~0.50
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_250331				

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_SW018
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	0020_SD028
CLIENT:	Department of Defence	**DATE:**	31/03/2025 **TIME:** 12:04:00 PM
SITE:	HMAS Creswell / AEC E	**LOGGED BY:**	AD/AK

COORDINATES/GPS *(if applicable)* 290309.19, 6110291.12, see Figure 4B. Historical ID: E_SW01 (SW), E_SD01 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** Grab **SEDIMENT:** Trowel

DETAILED SAMPLE LOCATION DESCRIPTION Next to steel cable

ENVIRONMENTAL OBSERVATIONS

WEATHER	Rain
VEGETATION	Grass and shrubs on bank
SLOPE	Shallow to flat
EROSION	None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Pale yellow tinge, clear, no odour, no sheen
SEDIMENT (describe as soil)	Silty SAND, fine to medium grain, sub-rounded to rounded, dark grey, saturated, no odour, no sheen

FIELD MEASUREMENTS

TEMPERATURE (°C)	22.0
DO (mg/L)	5.16
DO (%S)	59.10
CONDUCTIVITY (µS/cm)	368.3
pH (pH units)	6.93
REDOX (mV)	71.6
TDS (mg/L)	253.50

HYDROLOGICAL DATA

FLOW MEASUREMENT	NA (Treatment Pond)
CROSS SECTION WIDTH (m)	~50 (Treatment Pond)
DEPTH (m)	~0.50
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_SW018_250331	QC150	0020_QC150_250331		Yes
0020_SD028_250331				

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_SW022
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	0020_SD032
CLIENT:	Department of Defence	**DATE:**	31/03/2025 **TIME:** 1:15:00 PM
SITE:	HMAS Creswell / AEC F	**LOGGED BY:**	ES

COORDINATES/GPS *(if applicable)* 290905.52, 6110282.52, see Figure 4B. Historical ID: F_SW01 (SW), F_SD01 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** Syringe **SEDIMENT:** Trowel

DETAILED SAMPLE LOCATION DESCRIPTION Grate along road, outlet, western side

ENVIRONMENTAL OBSERVATIONS

WEATHER	Cloudy, rainy, windy
VEGETATION	Grass on outskirts and surrounding, and lots of leaf debris in channel
SLOPE	Slight, down from main road
EROSION	None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Slight pale yellow, no odour or sheen
SEDIMENT (describe as soil)	Silty SAND, brown with pale grey, fine to medium grained, loose, with organic matter, no odour or staining.

FIELD MEASUREMENTS

TEMPERATURE (°C)	18.9
DO (mg/L)	6.28
DO (%S)	37.50
CONDUCTIVITY (µS/cm)	195.0
pH (pH units)	6.55
REDOX (mV)	190.2
TDS (mg/L)	139.80

HYDROLOGICAL DATA

FLOW MEASUREMENT	No flow, ponded water in channel
CROSS SECTION WIDTH (m)	0.5
DEPTH (m)	0.15
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_SW022_250331	QC133, QC233	0020_QC133_250331	0020_QC233_250331	Yes
0020_SD032_250331	QC132, QC232	0020_QC132_250331	0020_QC232_250331	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_SW023
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	0020_SD033
CLIENT:	_SD0E3	**DATE:**	31/03/2025 **TIME:** 1:26:00 PM
SITE:	HMAS Creswell / AEC F	**LOGGED BY:**	ES

COORDINATES/GPS *(if applicable)* 290912.6, 6110335.64, see Figure 4B. Historical ID: F_SW02 (SW), F_SD02 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** Grab **SEDIMENT:** Trowel

DETAILED SAMPLE LOCATION DESCRIPTION Culvert outlet

ENVIRONMENTAL OBSERVATIONS

WEATHER	Cloudy, rainy, windy
VEGETATION	Grass on surrounds
SLOPE	Slight downhill from road
EROSION	No

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Pale yellow, clear, no odour, no sheen
SEDIMENT (describe as soil)	Sandy SILT, fine, loose, saturated, with organic matter and worms

FIELD MEASUREMENTS

TEMPERATURE (°C)	19.0
DO (mg/L)	8.23
DO (%S)	87.30
CONDUCTIVITY (µS/cm)	156.6
pH (pH units)	6.59
REDOX (mV)	186.0
TDS (mg/L)	115.70

HYDROLOGICAL DATA

FLOW MEASUREMENT	None, ponded
CROSS SECTION WIDTH (m)	0.3
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?
0020_SW023_250331				No
0020_SD033_250331				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_SW026
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	0020_SD001
CLIENT:	Department of Defence	**DATE:**	01/04/2025 **TIME:** 8:47:00 AM
SITE:	HMAS Creswell / Flatrock Creek	**LOGGED BY:**	AD/AK

COORDINATES/GPS *(if applicable)* 290792.13, 6110775.46, see Figure 4B. Historical ID: FC_SW01 (SW), FC_SD01 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** Grab **SEDIMENT:** Trowel

DETAILED SAMPLE LOCATION DESCRIPTION Approx 20m upstream of bridge, left bank

ENVIRONMENTAL OBSERVATIONS

WEATHER	Cloudy, moderate wind
VEGETATION	Trees overhanging right bank
SLOPE	Gentle
EROSION	None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Very pale yellow tinge, clear, very slight organic odour, no sheen
SEDIMENT (describe as soil)	SAND, fine grain, rounded to sub-rounded, pale yellow-grey

FIELD MEASUREMENTS

TEMPERATURE (°C)	18.8
DO (mg/L)	5.62
DO (%S)	66.80
CONDUCTIVITY (µS/cm)	29438.0
pH (pH units)	7.45
REDOX (mV)	-38.2
TDS (mg/L)	21619.00

HYDROLOGICAL DATA

FLOW MEASUREMENT	Wave influenced
CROSS SECTION WIDTH (m)	<10
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_SW026_250401	QC251	0020_QC251_250401		No
0020_SD001_250401	QC253	0020_QC253_250401		No

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

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:	Department of Defence	**DATE:**	01/04/2025 **TIME:** 8:31:00 AM
SITE:	HMAS Creswell / Flatrock Creek	**LOGGED BY:**	AD/AK

COORDINATES/GPS *(if applicable)* 290711.88, 6110653.45, see Figure 4B. Historical ID: FC_SW02 (SW), FC_SD02 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** Grab with pole **SEDIMENT:** Trowel

DETAILED SAMPLE LOCATION DESCRIPTION down steep bank, parallel to MW068

ENVIRONMENTAL OBSERVATIONS

WEATHER	Cloudy, moderate wind
VEGETATION	native trees, fern
SLOPE	Steep bank to water edge, slight slope in creek
EROSION	None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	clear, yellow tinge, no odour, no sheen
SEDIMENT (describe as soil)	silty sand, dark brown and grey, fine to medium grained, slight organic odour, organic matter rootlets, leaves

FIELD MEASUREMENTS

TEMPERATURE (°C)	17.9
DO (mg/L)	4.52
DO (%S)	47.60
CONDUCTIVITY (µS/cm)	1138.0
pH (pH units)	5.06
REDOX (mV)	134.9
TDS (mg/L)	858.00

HYDROLOGICAL DATA

FLOW MEASUREMENT	1cm/sec
CROSS SECTION WIDTH (m)	20m
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_SW027_250401	QC250	0020_QC250_250401		No
0020_SD002_250401	QC252	0020_QC252_250401		No

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

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:**	31/03/2025 **TIME:** 10:55:00 AM
SITE:	HMAS Creswell / Flatrock Creek	**LOGGED BY:**	AD/AK

COORDINATES/GPS *(if applicable)* 290438.3, 6110792.31, see Figure 4B. Historical ID: FC_SW04 (SW), FC_SD04 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** Grab **SEDIMENT:** Trowel

DETAILED SAMPLE LOCATION DESCRIPTION ~100m downstream of bridge, left bank

ENVIRONMENTAL OBSERVATIONS

WEATHER	Rain, wind
VEGETATION	Shrubs and trees overhanging channel
SLOPE	Shallow channel slope
EROSION	None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Pale yellow tinge, clear, slight rotten egg odour, no sheen
SEDIMENT (describe as soil)	Silty SAND, fine to medium grain, sub-rounded to rounded, dark grey, saturated, no odour, no sheen

FIELD MEASUREMENTS

TEMPERATURE (°C)	19.0
DO (mg/L)	4.37
DO (%S)	46.90
CONDUCTIVITY (µS/cm)	1842.0
pH (pH units)	4.87
REDOX (mV)	104.7
TDS (mg/L)	1358.50

HYDROLOGICAL DATA

FLOW MEASUREMENT	~0.05-0.10m/s
CROSS SECTION WIDTH (m)	~10-15
DEPTH (m)	<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_SW029_250331				
0020_SD004_250331	QC151	0020_QC151_250331		No

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

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:**	31/03/2025 **TIME:** 4:24:00 PM
SITE:	BNP / Flatrock Creek	**LOGGED BY:**	AD/AK

COORDINATES/GPS *(if applicable)* 289697.86, 6109773.99, see Figure 4B. Historical ID: FC_SW05 (SW)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** Grab **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION Left bank before culvert

ENVIRONMENTAL OBSERVATIONS

WEATHER	Rain
VEGETATION	Trees and shrubs alongside and overhanging channel
SLOPE	Shallow
EROSION	None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Pale yellow tinge, clear, no odour, no sheen
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	19.1
DO (mg/L)	7.82
DO (%S)	83.80
CONDUCTIVITY (µS/cm)	171.6
pH (pH units)	4.24
REDOX (mV)	193.9
TDS (mg/L)	125.45

HYDROLOGICAL DATA

FLOW MEASUREMENT	~1m/s
CROSS SECTION WIDTH (m)	<15
DEPTH (m)	<0.10
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_250331				

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

SURFACE WATER AND SEDIMENT SAMPLING RECORD

PROJECT NO.:	12626622	**SURFACE WATER ID:**	0020_SW032
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	0020_SD006
CLIENT:	Department of Defence	**DATE:**	31/03/2025 **TIME:** 4:06:00 PM
SITE:	BNP / Flatrock Creek	**LOGGED BY:**	AD/AK

COORDINATES/GPS *(if applicable)* 290069.73, 6109596.41, see Figure 4B. Historical ID: FC_SW13 (SW), FC_SD13 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** Grab **SEDIMENT:** SD006

DETAILED SAMPLE LOCATION DESCRIPTION Ponded water slightly upstream of culvert

ENVIRONMENTAL OBSERVATIONS

WEATHER	Rain
VEGETATION	Trees and shrubs alongside and overhanging
SLOPE	Shallow
EROSION	None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Pale yellow tinge, no odour, no sheen, foam buildup on surface
SEDIMENT (describe as soil)	Gravelly SAND, fine to coarse grain, sub-angular to sub-rounded, pale grey, gravels fine to medium grain, angular to sub-angular

FIELD MEASUREMENTS

TEMPERATURE (°C)	19.5
DO (mg/L)	9.26
DO (%S)	101.00
CONDUCTIVITY (µS/cm)	197.5
pH (pH units)	3.80
REDOX (mV)	192.8
TDS (mg/L)	143.65

HYDROLOGICAL DATA

FLOW MEASUREMENT	~0.05m/s
CROSS SECTION WIDTH (m)	<3
DEPTH (m)	<0.30
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_SW032_250331	QC152	0020_QC152_250331		
0020_SD006_250331				

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_SW033
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	0020_SD007
CLIENT:	Department of Defence	**DATE:**	01/04/2025 **TIME:** 9:05:00 AM
SITE:	HMAS Creswell / Flatrock Creek	**LOGGED BY:**	AD/AK

COORDINATES/GPS *(if applicable)* 290794.33, 6110816.42, see Figure 4B. Historical ID: FC_SW14 (SW), FC_SD14 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** Grab **SEDIMENT:** Trowel

DETAILED SAMPLE LOCATION DESCRIPTION Approx. 50m downstream of bridge, left bank

ENVIRONMENTAL OBSERVATIONS

WEATHER	Cloudy, moderate wind
VEGETATION	None
SLOPE	Gentle
EROSION	None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Clear, no odour, no sheen
SEDIMENT (describe as soil)	SAND, fine grain, rounded to sub-rounded, pale yellow-grey

FIELD MEASUREMENTS

TEMPERATURE (°C)	19.8
DO (mg/L)	4.20
DO (%S)	55.70
CONDUCTIVITY (µS/cm)	45619.0
pH (pH units)	7.98
REDOX (mV)	-28.5
TDS (mg/L)	33098.00

HYDROLOGICAL DATA

FLOW MEASUREMENT	Wave influenced
CROSS SECTION WIDTH (m)	<10
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_SW033_250401				No
0020_SD007_250401				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_SW035
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	
CLIENT:	Department of Defence	**DATE:**	31/03/2025 **TIME:** 10:20:00 AM
SITE:	HMAS Creswell / AEC G	**LOGGED BY:**	JM/AT

COORDINATES/GPS *(if applicable)* 291280.77, 6110303.61, see Figure 4B. Historical ID: G_SW01 (SW)

SAMPLING METHOD
(ie grab, bucket; if dry leave blank) **SURFACE WATER:** Grab **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION

ENVIRONMENTAL OBSERVATIONS

WEATHER	overcast, raining
VEGETATION	n/a
SLOPE	n/a
EROSION	n/a

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	brown, turbid, sewerage odour, no sheen,
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	20.7
DO (mg/L)	3.73
DO (%S)	
CONDUCTIVITY (µS/cm)	273.1
pH (pH units)	6.80
REDOX (mV)	44.0
TDS (mg/L)	193.00

HYDROLOGICAL DATA

FLOW MEASUREMENT	flowing
CROSS SECTION WIDTH (m)	0.5
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_SW035_250331				

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_SW036
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	
CLIENT:	Department of Defence	**DATE:**	31/03/2025 **TIME:** 10:00:00 AM
SITE:	HMAS Creswell / AEC G	**LOGGED BY:**	JM/AT

COORDINATES/GPS *(if applicable)* 291295.14, 6110317.65, see Figure 4B. Historical ID: G_SW02 (SW)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** grab **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION Collected from aeration pond, no aeration at time of sampling.

ENVIRONMENTAL OBSERVATIONS

WEATHER	raining heavy
VEGETATION	n/a
SLOPE	n/a
EROSION	n/a

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	brown, turbid, slight sewerage odour, no sheen, some flocculation
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	20.7
DO (mg/L)	2.81
DO (%S)	
CONDUCTIVITY (µS/cm)	244.5
pH (pH units)	5.92
REDOX (mV)	6.2
TDS (mg/L)	173.70

HYDROLOGICAL DATA

FLOW MEASUREMENT	not flowing, pond
CROSS SECTION WIDTH (m)	n/a
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_SW036_250331				

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:**	31/03/2025 **TIME:** 9:45:00 AM
SITE:	HMAS Creswell / AEC G	**LOGGED BY:**	JM /AT

COORDINATES/GPS *(if applicable)* 291297.2, 6110362.77, see Figure 4B. Historical ID: G_SW03 (SW)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** Grab **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION Sample collected from outlet pit. See photo

ENVIRONMENTAL OBSERVATIONS

WEATHER	Rainy overcast
VEGETATION	grass around pit.
SLOPE	n/a
EROSION	n/a

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Clear, low turbidity, no sheen, chlorine odour
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	21.2
DO (mg/L)	5.59
DO (%S)	
CONDUCTIVITY (µS/cm)	3164.0
pH (pH units)	5.89
REDOX (mV)	336.6
TDS (mg/L)	221.70

HYDROLOGICAL DATA

FLOW MEASUREMENT	moderate flow
CROSS SECTION WIDTH (m)	1m
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_SW037_250331				

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:**	01/04/2025 **TIME:**
SITE:	HMAS Creswell / AEC E	**LOGGED BY:**	AD/AK

COORDINATES/GPS *(if applicable)* 290607.55, 6110434.4, see Figure 4B.

SAMPLING METHOD
(ie grab, bucket; if dry leave blank) **SURFACE WATER:** **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION Next to culvert

ENVIRONMENTAL OBSERVATIONS

WEATHER	Cloudy, moderate wind
VEGETATION	Grass
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	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): Dry, no samples collected

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:**	31/03/2025 **TIME:** 9:45:00 AM
SITE:	HMAS Creswell / AEC G	**LOGGED BY:**	JM /AT

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 Sampled from culvert outlet.

ENVIRONMENTAL OBSERVATIONS

WEATHER	Rainy overcast
VEGETATION	Ferns, vegetated drain banks
SLOPE	Gradual slope, towards Captains
EROSION	

DESCRIPTIONS

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

FIELD MEASUREMENTS

TEMPERATURE (°C)	19.4
DO (mg/L)	7.10
DO (%S)	
CONDUCTIVITY (µS/cm)	181.6
pH (pH units)	5.92
REDOX (mV)	105.5
TDS (mg/L)	1323.00

HYDROLOGICAL DATA

FLOW MEASUREMENT	moderate flow, out of culvert
CROSS SECTION WIDTH (m)	1m
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_SW057_250331	QC100, QC200	0020_QC100_250331	0020_QC200_250331	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:**	0021_OTH001
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	
CLIENT:	Department of Defence	**DATE:**	07/04/2025 **TIME:** 12:24:00 PM
SITE:	JBRF / AEC A	**LOGGED BY:**	JM/AD

COORDINATES/GPS *(if applicable)*

SAMPLING METHOD
(ie grab, bucket; if dry leave blank) **SURFACE WATER:** Grab **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION S415, sample point tap in cage

ENVIRONMENTAL OBSERVATIONS

WEATHER	Clear
VEGETATION	NA
SLOPE	NA
EROSION	NA

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Clear, distinct chlorine odour, no sheen
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	21.7
DO (mg/L)	6.53
DO (%S)	75.00
CONDUCTIVITY (µS/cm)	251.7
pH (pH units)	7.18
REDOX (mV)	669.1
TDS (mg/L)	174.20

HYDROLOGICAL DATA

FLOW MEASUREMENT	
CROSS SECTION WIDTH (m)	
DEPTH (m)	
OTHER	NA, Tank

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_250407	QC157, QC257	0021_QC157_250407	0021_QC257_250407	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:**	0021_OTH002
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	
CLIENT:	Department of Defence	**DATE:**	07/04/2025 **TIME:** 12:08:00 PM
SITE:	JBRF / AEC A	**LOGGED BY:**	AD/JM

COORDINATES/GPS *(if applicable)*

SAMPLING METHOD
(ie grab, bucket; if dry leave blank) **SURFACE WATER:** Grab **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION S416 Emergency Tank

ENVIRONMENTAL OBSERVATIONS

WEATHER	Clear
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)	20.5
DO (mg/L)	7.01
DO (%S)	78.20
CONDUCTIVITY (µS/cm)	890.0
pH (pH units)	7.00
REDOX (mV)	321.8
TDS (mg/L)	630.50

HYDROLOGICAL DATA

FLOW MEASUREMENT	
CROSS SECTION WIDTH (m)	
DEPTH (m)	
OTHER	NA, Tank Sample

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_250407				

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_OTH003
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	
CLIENT:	Department of Defence	**DATE:**	07/04/2025 **TIME:** 12:51:00 PM
SITE:	JBRF / AEC A	**LOGGED BY:**	JM/AD

COORDINATES/GPS *(if applicable)*

SAMPLING METHOD
(ie grab, bucket; if dry leave blank) **SURFACE WATER:** Peri pump (grab) **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION Veolia holding tank, underground

ENVIRONMENTAL OBSERVATIONS

WEATHER	Clear
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)	23.5
DO (mg/L)	4.70
DO (%S)	55.10
CONDUCTIVITY (µS/cm)	271.3
pH (pH units)	7.14
REDOX (mV)	443.4
TDS (mg/L)	181.35

HYDROLOGICAL DATA

FLOW MEASUREMENT	
CROSS SECTION WIDTH (m)	
DEPTH (m)	
OTHER	NA, Tank

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_OTH003_250407				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_OTH004
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	
CLIENT:	Department of Defence	**DATE:**	07/04/2025 **TIME:** 12:12:00 PM
SITE:	JBRF / AEC A	**LOGGED BY:**	JM/AD

COORDINATES/GPS *(if applicable)*

SAMPLING METHOD
(ie grab, bucket; if dry leave blank) **SURFACE WATER:** No access **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION S439 Tank

ENVIRONMENTAL OBSERVATIONS

WEATHER	Clear
VEGETATION	NA
SLOPE	NA
EROSION	NA

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Tap no longer present, unable to access
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	NA, Tank

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_OTH004_250407				

OTHER COMMENTS FOR CONSIDERATION
(e.g. health and safety, access issues, change in location, general observation, notes for future): Organise way to sample in future now tap has been removed

SURFACE WATER AND SEDIMENT SAMPLING RECORD

PROJECT NO.:	12626622	**SURFACE WATER ID:**	0021_OTH005
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	
CLIENT:	Department of Defence	**DATE:**	07/04/2025 **TIME:** 1:06:00 PM
SITE:	JBRF / AEC A	**LOGGED BY:**	JM/AD

COORDINATES/GPS *(if applicable)*

SAMPLING METHOD
(ie grab, bucket; if dry leave blank) **SURFACE WATER:** Peri pump (grab) **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION S440, underground tank

ENVIRONMENTAL OBSERVATIONS

WEATHER	Clear
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)	21.8
DO (mg/L)	5.22
DO (%S)	60.10
CONDUCTIVITY (µS/cm)	91.4
pH (pH units)	9.00
REDOX (mV)	393.6
TDS (mg/L)	63.00

HYDROLOGICAL DATA

FLOW MEASUREMENT	
CROSS SECTION WIDTH (m)	
DEPTH (m)	
OTHER	NA, Tank

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_OTH005_250407				

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:**	07/04/2025 **TIME:** 12:16:00 PM
SITE:	JBRF / AEC A	**LOGGED BY:**	JM/AD

COORDINATES/GPS *(if applicable)*

SAMPLING METHOD
(ie grab, bucket; if dry leave blank) **SURFACE WATER:** Grab **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION S482, dosing building, post filteation water tap, red tap on wall

ENVIRONMENTAL OBSERVATIONS

WEATHER	Clear
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)	20.6
DO (mg/L)	7.15
DO (%S)	79.40
CONDUCTIVITY (µS/cm)	1574.0
pH (pH units)	2.73
REDOX (mV)	778.5
TDS (mg/L)	1118.50

HYDROLOGICAL DATA

FLOW MEASUREMENT	
CROSS SECTION WIDTH (m)	
DEPTH (m)	
OTHER	NA, Tank

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_250407				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:**	
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	0021_SD011
CLIENT:	Department of Defence	**DATE:**	01/04/2025 **TIME:** 4:30:00 PM
SITE:	JBRF / Captains Lagoon	**LOGGED BY:**	AT

COORDINATES/GPS *(if applicable)* 291134.2, 6107649, see Figure 4A. Historical ID: CL_SD11 (SED)

SAMPLING METHOD
(ie grab, bucket; if dry leave blank) **SURFACE WATER:** **SEDIMENT:** grab

DETAILED SAMPLE LOCATION DESCRIPTION jbrf drain culvert along wreck bay road

ENVIRONMENTAL OBSERVATIONS

WEATHER	partly cloudy
VEGETATION	grass
SLOPE	near flat
EROSION	NA

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	
SEDIMENT (describe as soil)	gravelly sand, grey, fine to coarse grained, fine angular gravel, trace silt, no odour

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_SD011_250401				

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:**	0021_SD001
CLIENT:	Department of Defence	**DATE:**	03/04/2025 **TIME:** 1:52:00 PM
SITE:	JBRF / AEC A/B	**LOGGED BY:**	ES

COORDINATES/GPS *(if applicable)* 290683.95, 6107696.48, see Figure 4A. Historical ID: AB_SW01 (SW), AB_SD01 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** Grab **SEDIMENT:** Grab

DETAILED SAMPLE LOCATION DESCRIPTION Culvert outlet and channel near site boundary. Insufficient water at culvert outlet so sampled from channel approx. 6m down from culvert outlet. Culvert channel is overgrown

ENVIRONMENTAL OBSERVATIONS

WEATHER	Sunny, windy
VEGETATION	Grass surrounding channel and culvert outlet.
SLOPE	Slight on either side
EROSION	None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Clear, no odour or sheen.
SEDIMENT (describe as soil)	Silty SAND, fine to medium grained, loose, with organic matter (grass roots)

FIELD MEASUREMENTS

TEMPERATURE (°C)	25.6
DO (mg/L)	3.70
DO (%S)	45.40
CONDUCTIVITY (µS/cm)	400.0
pH (pH units)	5.52
REDOX (mV)	0.7
TDS (mg/L)	257.40

HYDROLOGICAL DATA

FLOW MEASUREMENT	None, stagnant in channel
CROSS SECTION WIDTH (m)	0.4
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_SW001_250403				
0021_SD001_250403				

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_SW002
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	0021_SD002
CLIENT:	Department of Defence	**DATE:**	03/04/2025 **TIME:** 3:10:00 PM
SITE:	JBRF / AEC A/B	**LOGGED BY:**	AK/AD

COORDINATES/GPS *(if applicable)* 290621.53, 6107560.2, see Figure 4A. Historical ID: AB_SW02 (SW), AB_SD02 (SED)

SAMPLING METHOD
(ie grab, bucket; if dry leave blank) **SURFACE WATER:** **SEDIMENT:** Grab

DETAILED SAMPLE LOCATION DESCRIPTION

ENVIRONMENTAL OBSERVATIONS

WEATHER	Clear
VEGETATION	Small shrubs
SLOPE	Very slight to flat
EROSION	None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Dry
SEDIMENT (describe as soil)	SAND, fine to medium grain, sub-rounded to rounded, yellow-brown, with fine grain gravel and organic material, wet, no odour, no sheen

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?**
0021_SD002_250403				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_SW003
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	0021_SD003
CLIENT:	Department of Defence	**DATE:**	03/04/2025 **TIME:**
SITE:	JBRF / AEC A/B	**LOGGED BY:**	ES

COORDINATES/GPS *(if applicable)* 290662.01, 6107483.79, see Figure 4A. Historical ID: AB_SW03 (SW), AB_SD03 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** Grab **SEDIMENT:** Grab

DETAILED SAMPLE LOCATION DESCRIPTION In cleared grass corridor, mobile plant tracks filed with surface water

ENVIRONMENTAL OBSERVATIONS

WEATHER	Sunny
VEGETATION	Dead grass
SLOPE	Flat
EROSION	None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Pale brown, moderate turbidity, no odour or sheen
SEDIMENT (describe as soil)	Sandy SILT, dark brown, fine grained, loose, with organic matter (grass roots)

FIELD MEASUREMENTS

TEMPERATURE (°C)	25.7
DO (mg/L)	5.83
DO (%S)	68.80
CONDUCTIVITY (µS/cm)	293.8
pH (pH units)	3.07
REDOX (mV)	185.4
TDS (mg/L)	179.00

HYDROLOGICAL DATA

FLOW MEASUREMENT	Not flowing, stagnant
CROSS SECTION WIDTH (m)	0.1
DEPTH (m)	0.05
OTHER	Confirmed YSI was showing pH 3 water by moving to nearby area

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_SW003_250403				
0021_SD003_250403				

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_SW004
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	0021_SD004
CLIENT:	_	**DATE:**	02/04/2025 **TIME:** 8:30:00 AM
SITE:	JBRF / AEC A/B	**LOGGED BY:**	JNM

COORDINATES/GPS *(if applicable)* 290426.13, 6107306.54, see Figure 4A. Historical ID: AB_SW04 (SW), AB_SD04 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** grab **SEDIMENT:** grab

DETAILED SAMPLE LOCATION DESCRIPTION Pooled water at swale drain next to access road.

ENVIRONMENTAL OBSERVATIONS

WEATHER	Fine, sunny
VEGETATION	Grassed areas.
SLOPE	Near flat
EROSION	None observed at location. Superficial erosion scours of access road.

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Clear, low turbidity, no odour, no sheen
SEDIMENT (describe as soil)	sandy silt, dark brown, fine to medium grained sand, with organics (rootlets), some clay

FIELD MEASUREMENTS

TEMPERATURE (°C)	15.0
DO (mg/L)	
DO (%S)	5.04
CONDUCTIVITY (µS/cm)	193.8
pH (pH units)	4.20
REDOX (mV)	239.7
TDS (mg/L)	156.00

HYDROLOGICAL DATA

FLOW MEASUREMENT	Not flowing
CROSS SECTION WIDTH (m)	2
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_SW004_250402				
0021_SD004_250402				

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_SW005
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	0021_SD110
CLIENT:	Department of Defence	**DATE:**	02/04/2025 **TIME:** 8:36:00 AM
SITE:	JBRF / AEC A/B	**LOGGED BY:**	AK

COORDINATES/GPS *(if applicable)* 290528.5, 6107340, see Figure 4A. Historical ID: AB_SW05 (SW)

SAMPLING METHOD
(ie grab, bucket; if dry leave blank) **SURFACE WATER:** grab **SEDIMENT:** grab

DETAILED SAMPLE LOCATION DESCRIPTION Airside, creek running over aandstone and through reeds

ENVIRONMENTAL OBSERVATIONS

WEATHER	Clear
VEGETATION	Reeds
SLOPE	slight
EROSION	none

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Clear, no odour or sheen
SEDIMENT (describe as soil)	Silty sand, light yellow grey, medium grained, rounded, mixed through dark brown organic matter plant roots, no odour

FIELD MEASUREMENTS

TEMPERATURE (°C)	17.3
DO (mg/L)	5.09
DO (%S)	52.40
CONDUCTIVITY (µS/cm)	272.8
pH (pH units)	3.99
REDOX (mV)	226.5
TDS (mg/L)	208.00

HYDROLOGICAL DATA

FLOW MEASUREMENT	slow, 0.1 m/s
CROSS SECTION WIDTH (m)	4
DEPTH (m)	5cm
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_SW005_250402				
0021_SD110_250402				

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_SW006
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	0021_SD005
CLIENT:	Department of Defence	**DATE:**	02/04/2025 **TIME:** 8:52:00 AM
SITE:	JBRF / AEC A/B	**LOGGED BY:**	AK

COORDINATES/GPS *(if applicable)* 290499.46, 6107309.51, see Figure 4A. Historical ID: AB_SW06 (SW), AB_SD06 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** grab **SEDIMENT:** grab

DETAILED SAMPLE LOCATION DESCRIPTION Airside, inlet of drain wherenthree streams converge

ENVIRONMENTAL OBSERVATIONS

WEATHER	Clear
VEGETATION	Reeds
SLOPE	slight
EROSION	none

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Clear, no odour or sheen
SEDIMENT (describe as soil)	Silty sand, light yellow grey, medium grained, rounded, no odour

FIELD MEASUREMENTS

TEMPERATURE (°C)	16.9
DO (mg/L)	7.91
DO (%S)	81.70
CONDUCTIVITY (µS/cm)	199.2
pH (pH units)	4.02
REDOX (mV)	218.9
TDS (mg/L)	152.80

HYDROLOGICAL DATA

FLOW MEASUREMENT	0.5 m/s
CROSS SECTION WIDTH (m)	4
DEPTH (m)	5cm
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_SW006_250402				
0021_SD005_250402				

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_SW010
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	0021_SD006
CLIENT:	Department of Defence	**DATE:**	04/04/2025 **TIME:** 4:13:00 PM
SITE:	JBRF / AEC B	**LOGGED BY:**	ES / AD

COORDINATES/GPS *(if applicable)* 290129.98, 6107234.12, see Figure 4A. Historical ID: B_SW01 (SW), B_SD01 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** Grab **SEDIMENT:** Grab

DETAILED SAMPLE LOCATION DESCRIPTION On GPS coordinates, off gravel road in boggy path with native grasses

ENVIRONMENTAL OBSERVATIONS

WEATHER	Some overcast
VEGETATION	Mowed grass corridor in clearway
SLOPE	Mostly flat
EROSION	None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Pale yellow-brown, clear, no odour, no sheen
SEDIMENT (describe as soil)	SILT, dark brown to black with orange water coming out, with sand, with organic matter, organic odour, no staining

FIELD MEASUREMENTS

TEMPERATURE (°C)	17.3
DO (mg/L)	1.86
DO (%S)	18.90
CONDUCTIVITY (µS/cm)	208.4
pH (pH units)	5.15
REDOX (mV)	44.6
TDS (mg/L)	16.00

HYDROLOGICAL DATA

FLOW MEASUREMENT	Small ponded areas in boggy patch, not flowing, stagnant
CROSS SECTION WIDTH (m)	3
DEPTH (m)	0.02
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_SW010_250404				
0021_SD006_250404				

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:**	0021_SD007
CLIENT:	Department of Defence	**DATE:**	04/04/2025 **TIME:** 4:30:00 PM
SITE:	JBRF / AEC B	**LOGGED BY:**	ES / AD

COORDINATES/GPS *(if applicable)* 290331.58, 6107210.14, see Figure 4A. Historical ID: B_SW02 (SW), B_SD02 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION On GPS coordinates, in cleared EPS grass corridor

ENVIRONMENTAL OBSERVATIONS

WEATHER	Sunny
VEGETATION	Grasses
SLOPE	Shallow
EROSION	None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	DRY - no surface water present in grassed area, no clear channel as shown on map.
SEDIMENT (describe as soil)	DRY

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_SW012
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	
CLIENT:	Department of Defence	**DATE:**	31/03/2025 **TIME:** 3:00:00 PM
SITE:	JBRF	**LOGGED BY:**	AT JM

COORDINATES/GPS *(if applicable)* 290302.87, 6107558.97, see Figure 4A. Historical ID: B_SW03 (SW)

SAMPLING METHOD
(ie grab, bucket; if dry leave blank) **SURFACE WATER:** grab **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION M-N culvert

ENVIRONMENTAL OBSERVATIONS

WEATHER	overcast and rain
VEGETATION	grass / reeds
SLOPE	drain
EROSION	road base bank erosion

DESCRIPTIONS

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

FIELD MEASUREMENTS

TEMPERATURE (°C)	19.6
DO (mg/L)	7.40
DO (%S)	
CONDUCTIVITY (µS/cm)	135.9
pH (pH units)	6.00
REDOX (mV)	-34.5
TDS (mg/L)	100.20

HYDROLOGICAL DATA

FLOW MEASUREMENT	fast flow turbulent
CROSS SECTION WIDTH (m)	1.5
DEPTH (m)	0.2
OTHER	drain culvert

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_SW012_250331				

OTHER COMMENTS FOR CONSIDERATION
(e.g. health and safety, access issues, change in location, general observation, notes for future): sample not taken airside but on ring road

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:**	01/04/2025 **TIME:** 4:00:00 PM
SITE:	JBRF / Captains Lagoon	**LOGGED BY:**	AT

COORDINATES/GPS *(if applicable)* 290873.11, 6108648.01, see Figure 4A. Historical ID: CL_SW09 (SW), CL_SD09 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** grab **SEDIMENT:** grab

DETAILED SAMPLE LOCATION DESCRIPTION side of wreck bay road, drain culvert

ENVIRONMENTAL OBSERVATIONS

WEATHER	partly cloudy
VEGETATION	ferns, banksias
SLOPE	slight slope to culvert
EROSION	nil evidence

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	colourless, no odour, no sheen, low turbidity
SEDIMENT (describe as soil)	gravelly sand, trace silt organics

FIELD MEASUREMENTS

TEMPERATURE (°C)	18.4
DO (mg/L)	
DO (%S)	69.20
CONDUCTIVITY (µS/cm)	376.8
pH (pH units)	5.29
REDOX (mV)	131.8
TDS (mg/L)	280.15

HYDROLOGICAL DATA

FLOW MEASUREMENT	steady flow
CROSS SECTION WIDTH (m)	4m
DEPTH (m)	0.05
OTHER	rock JB sandstone bottom

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_SW013_250401				
0021_SD009_250401				

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_SW016
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	0021_SD012
CLIENT:	_	**DATE:**	02/04/2025 **TIME:** 8:45:00 AM
SITE:	JBRF / JBRF	**LOGGED BY:**	JNM

COORDINATES/GPS *(if applicable)* 290494.61, 6107369.61, see Figure 4A. Historical ID: DC_SW01 (SW), DC_SD01 (SED)

SAMPLING METHOD
(ie grab, bucket; if dry leave blank) **SURFACE WATER:** **SEDIMENT:** grab

DETAILED SAMPLE LOCATION DESCRIPTION Sample collected from sediment buildup from recent rain event.

ENVIRONMENTAL OBSERVATIONS

WEATHER	Fine, sunny
VEGETATION	Grassed areas nearby.
SLOPE	Near flat, low grade in northerly direction.
EROSION	Significant erosion scouring in the area.

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Dry
SEDIMENT (describe as soil)	Sand, fine to medium grained, pale brown, some silt, saturated.

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_SD012_250402				

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_SW017
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	0021_SD013
CLIENT:	Department of Defence	**DATE:**	02/04/2025 **TIME:** 9:07:00 AM
SITE:	JBRF / JBRF	**LOGGED BY:**	AK

COORDINATES/GPS *(if applicable)* 290419.84, 6107632.75, see Figure 4A. Historical ID: DC_SW02 (SW), DC_SD02 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** **SEDIMENT:** Grab

DETAILED SAMPLE LOCATION DESCRIPTION Airside, SW dry, sediment sampled from where water flows over the ground, evidenced by markungs in sand

ENVIRONMENTAL OBSERVATIONS

WEATHER	Clear
VEGETATION	small reeds
SLOPE	none
EROSION	none

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Dry
SEDIMENT (describe as soil)	silty sand, pale brown grey, dine to medium, rounded, no odour

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?**
0021_SD013_250402				

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_SW018
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	0021_SD014
CLIENT:	_	**DATE:**	02/04/2025 **TIME:** 9:10:00 AM
SITE:	JBRF / JBRF	**LOGGED BY:**	JNM

COORDINATES/GPS *(if applicable)* 290362.06, 6107842.21, see Figure 4A. Historical ID: DC_SW03 (SW), DC_SD03 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** grab **SEDIMENT:** grab

DETAILED SAMPLE LOCATION DESCRIPTION Pooled water at swale drain. Sediment 2 m west of water in clear water path, and sediment accumalation area.

ENVIRONMENTAL OBSERVATIONS

WEATHER	Fine, sunny
VEGETATION	Grassed areas.
SLOPE	Near flat. Gradual rade north towards culvert pip neadwall.
EROSION	None observed at location. Superficial erosion of swale banks.

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Clear, low turbidity, no odour, no sheen
SEDIMENT (describe as soil)	Silty Sand, dark brown/ grey, fine to medium grained sand, with organics (rootlets), trace clay

FIELD MEASUREMENTS

TEMPERATURE (°C)	15.3
DO (mg/L)	
DO (%S)	5.25
CONDUCTIVITY (µS/cm)	509.0
pH (pH units)	5.91
REDOX (mV)	193.9
TDS (mg/L)	403.00

HYDROLOGICAL DATA

FLOW MEASUREMENT	Not flowing
CROSS SECTION WIDTH (m)	2
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_SW018_250402				
0021_SD014_250402				

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:**	0021_SD015
CLIENT:	Department of Defence	**DATE:**	03/04/2025 **TIME:** 2:20:00 PM
SITE:	JBRF / JBRF	**LOGGED BY:**	ES

COORDINATES/GPS *(if applicable)* 290590.23, 6107975.27, see Figure 4A. Historical ID: DC_SW04 (SW), DC_SD04 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** Grab **SEDIMENT:** Grab

DETAILED SAMPLE LOCATION DESCRIPTION Collected from channel next to gravel road, eastern side

ENVIRONMENTAL OBSERVATIONS

WEATHER	Sunny
VEGETATION	Some native shrubs, grass, small reeds
SLOPE	Mostly flat
EROSION	No

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Clear, no odour or sheen.
SEDIMENT (describe as soil)	SAND, grey-brown, medium grained, loose, some silt, some fine rounded to subrounded gravel, no odour or staining.

FIELD MEASUREMENTS

TEMPERATURE (°C)	22.2
DO (mg/L)	5.47
DO (%S)	63.00
CONDUCTIVITY (µS/cm)	391.1
pH (pH units)	6.11
REDOX (mV)	44.3
TDS (mg/L)	268.45

HYDROLOGICAL DATA

FLOW MEASUREMENT	None, not flowing, stagnant
CROSS SECTION WIDTH (m)	0.3
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_SW019_250403				
0021_SD015_250403	QC139, QC239	0021_QC139_250403	0021_QC239_250403	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:**	0021_SW020
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	0021_SD016
CLIENT:	Department of Defence	**DATE:**	02/04/2025 **TIME:** 9:52:00 AM
SITE:	JBRF / JBRF	**LOGGED BY:**	AK

COORDINATES/GPS *(if applicable)* 290288.47, 6108274.91, see Figure 4A. Historical ID: DC_SW05 (SW), DC_SD05 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** grab **SEDIMENT:** grab

DETAILED SAMPLE LOCATION DESCRIPTION pooled water before inlet

ENVIRONMENTAL OBSERVATIONS

WEATHER	Fine
VEGETATION	reeds
SLOPE	none
EROSION	none

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	clear, slight yellow tinge, no odour or sheen
SEDIMENT (describe as soil)	sandy silt, dark brown, fine, sub-rounded to rounded, no odour

FIELD MEASUREMENTS

TEMPERATURE (°C)	18.2
DO (mg/L)	5.82
DO (%S)	61.90
CONDUCTIVITY (µS/cm)	196.8
pH (pH units)	5.37
REDOX (mV)	171.9
TDS (mg/L)	14701.00

HYDROLOGICAL DATA

FLOW MEASUREMENT	stagnant
CROSS SECTION WIDTH (m)	10 m
DEPTH (m)	20 cm
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_SW020_250402				
0021_SD016_250402				

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:**	0021_SD017
CLIENT:	Department of Defence	**DATE:**	02/04/2025 **TIME:** 9:30:00 AM
SITE:	JBRF / JBRF	**LOGGED BY:**	JNM

COORDINATES/GPS *(if applicable)* 290578.19, 6108252.42, see Figure 4A. Historical ID: DC_SW06 (SW), DC_SD06 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** grab **SEDIMENT:** grab

DETAILED SAMPLE LOCATION DESCRIPTION Pooled water at swale drain. Sediment within swale drain.

ENVIRONMENTAL OBSERVATIONS

WEATHER	Fine, sunny
VEGETATION	Grassed areas.
SLOPE	Near flat. Gradual grade west towards culvert pipe headwall.
EROSION	None observed at location.

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Clear, low turbidity, no odour, no sheen
SEDIMENT (describe as soil)	Silty Sand, dark brown/ grey, fine to medium grained sand, with organics (rootlets), trace clay

FIELD MEASUREMENTS

TEMPERATURE (°C)	16.5
DO (mg/L)	5.14
DO (%S)	
CONDUCTIVITY (µS/cm)	369.3
pH (pH units)	5.73
REDOX (mV)	193.2
TDS (mg/L)	288.50

HYDROLOGICAL DATA

FLOW MEASUREMENT	Not flowing
CROSS SECTION WIDTH (m)	2
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_SW021_250402	QC106, QC206	0021_QC106_250402	0021_QC206_250402	Yes
0021_SD017_250402				

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:**	03/04/2025 **TIME:** 4:05:00 PM
SITE:	JBRF / Flatrock Creek	**LOGGED BY:**	AK, AD, ES

COORDINATES/GPS *(if applicable)* 289828.77, 6108977.95, see Figure 4A. Historical ID: FC_SW06 (SW), FC_SD06 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** grab **SEDIMENT:** grab

DETAILED SAMPLE LOCATION DESCRIPTION pooled water along path

ENVIRONMENTAL OBSERVATIONS

WEATHER	fine, clear
VEGETATION	small shrubs, grass
SLOPE	none
EROSION	none

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	clear, no odour or sheen
SEDIMENT (describe as soil)	sandy silt, dark brown, fine, medium plasticity, with organic material grass,

FIELD MEASUREMENTS

TEMPERATURE (°C)	21.9
DO (mg/L)	2.64
DO (%S)	30.50
CONDUCTIVITY (µS/cm)	201.6
pH (pH units)	5.37
REDOX (mV)	91.4
TDS (mg/L)	139.10

HYDROLOGICAL DATA

FLOW MEASUREMENT	stagnant
CROSS SECTION WIDTH (m)	2m
DEPTH (m)	20cm
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_250403				
0021_SD018_250403				

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_SW024
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	0021_SD020
CLIENT:	Department of Defence	**DATE:**	03/04/2025 **TIME:** 3:25:00 PM
SITE:	JBRF / Flatrock Creek	**LOGGED BY:**	AK, AD, ES

COORDINATES/GPS *(if applicable)* 289800.4, 6108709.6, see Figure 4A. Historical ID: FC_SW08 (SW), FC_SD08 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** grab **SEDIMENT:** grab

DETAILED SAMPLE LOCATION DESCRIPTION

ENVIRONMENTAL OBSERVATIONS

WEATHER	fine, clear
VEGETATION	grass, shrubs
SLOPE	none
EROSION	none

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	clear, orange tinge, organic odour
SEDIMENT (describe as soil)	sandy silt, dark brown, fine, saturated, organic material, roots, grass, low plasticity

FIELD MEASUREMENTS

TEMPERATURE (°C)	24.0
DO (mg/L)	4.97
DO (%S)	58.10
CONDUCTIVITY (µS/cm)	199.9
pH (pH units)	5.06
REDOX (mV)	111.3
TDS (mg/L)	121.95

HYDROLOGICAL DATA

FLOW MEASUREMENT	stagnant
CROSS SECTION WIDTH (m)	2m
DEPTH (m)	20cm
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_SW024_250403				
0021_SD020_250403				

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:**	04/04/2025 **TIME:** 3:33:00 PM
SITE:	JBRF / Flatrock Creek	**LOGGED BY:**	ES / AD

COORDINATES/GPS *(if applicable)* 289581.99, 6108602.42, see Figure 4A. Historical ID: FC_SW09 (SW), FC_SD09 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** Grab **SEDIMENT:** Grab

DETAILED SAMPLE LOCATION DESCRIPTION On GPS coordinates, within reeds, 15m deep into vegetation from track

ENVIRONMENTAL OBSERVATIONS

WEATHER	Sunny
VEGETATION	Reeds within pond
SLOPE	Flat
EROSION	None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Yellow tinge, clear, slight organic odour, no sheen
SEDIMENT (describe as soil)	Sandy SILT, dark brown, with organic matter, organic odour, no staining

FIELD MEASUREMENTS

TEMPERATURE (°C)	18.0
DO (mg/L)	3.41
DO (%S)	35.10
CONDUCTIVITY (µS/cm)	249.0
pH (pH units)	4.42
REDOX (mV)	173.1
TDS (mg/L)	186.50

HYDROLOGICAL DATA

FLOW MEASUREMENT	Stagnant, ponded
CROSS SECTION WIDTH (m)	<0.5
DEPTH (m)	<0.10
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_SW025_250404				No
0021_SD021_250404				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_SW027
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	0021_SD023
CLIENT:	Department of Defence	**DATE:**	01/04/2025 **TIME:** 2:05:00 PM
SITE:	JBRF / Flatrock Creek	**LOGGED BY:**	JM

COORDINATES/GPS *(if applicable)* 290576.62, 6108832.99, see Figure 4A. Historical ID: FC_SW11 (SW), FC_SD11 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** grab **SEDIMENT:** grab

DETAILED SAMPLE LOCATION DESCRIPTION Sample collected from within pooled water in drain.

ENVIRONMENTAL OBSERVATIONS

WEATHER	Overcast, rain
VEGETATION	vegetated, drain, tea trees, grass
SLOPE	near flat
EROSION	none observed

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	clear, low turbidity, no sheen, no odour, some organic solids within water
SEDIMENT (describe as soil)	Sandy Silt, dark brown, fine to medium grained sand, trace organics, with clay

FIELD MEASUREMENTS

TEMPERATURE (°C)	18.6
DO (mg/L)	2.84
DO (%S)	
CONDUCTIVITY (µS/cm)	255.7
pH (pH units)	5.41
REDOX (mV)	28.6
TDS (mg/L)	189.80

HYDROLOGICAL DATA

FLOW MEASUREMENT	not flowing
CROSS SECTION WIDTH (m)	1
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?
0021_SW027_250401				
0021_SD023_250401				

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:**	0021_SD080
CLIENT:	Department of Defence	**DATE:**	04/04/2025 **TIME:** 1:28:00 PM
SITE:	JBRF / Lake McKenzie	**LOGGED BY:**	ES / AD

COORDINATES/GPS *(if applicable)* 287669.77, 6108446.98, see Figure 4D. Historical ID: LM_SW01 (SW), LM_SD01 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** Grab **SEDIMENT:** Grab

DETAILED SAMPLE LOCATION DESCRIPTION Edge of lake, on GPS coordinates, in area with dead trees.

ENVIRONMENTAL OBSERVATIONS

WEATHER	Sunny
VEGETATION	Dead trees surrounding this sample location, approx 20m every direction
SLOPE	Slight into lake
EROSION	None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Pale yellow, clear, slight organic odour, no sheen.
SEDIMENT (describe as soil)	Silty SAND, pale grey and brown, fine grained, with organic matter, loose, saturated, organic odour

FIELD MEASUREMENTS

TEMPERATURE (°C)	22.2
DO (mg/L)	7.74
DO (%S)	87.00
CONDUCTIVITY (µS/cm)	229.0
pH (pH units)	5.84
REDOX (mV)	21.5
TDS (mg/L)	157.30

HYDROLOGICAL DATA

FLOW MEASUREMENT	Not flowing, lake, appears to have surface wind ripples
CROSS SECTION WIDTH (m)	>100
DEPTH (m)	Unsure, >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_SW032_250404				
0021_SD080_250404	QC141, QC241	0021_QC141_250404	0021_QC241_250404	

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:**	0021_SD028
CLIENT:	Department of Defence	**DATE:**	04/04/2025 **TIME:** 1:45:00 PM
SITE:	JBRF / Lake McKenzie	**LOGGED BY:**	ES / AD

COORDINATES/GPS *(if applicable)* 288081.2, 6108114.26, see Figure 4D. Historical ID: LM_SW03 (SW), LM_SD03_WW (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** Grab **SEDIMENT:** Grab

DETAILED SAMPLE LOCATION DESCRIPTION Edge of lake, on GPS coordinates, in area with dead trees.

ENVIRONMENTAL OBSERVATIONS

WEATHER	Sunny
VEGETATION	Dead trees surrounding this sample location, approx 20m every direction
SLOPE	Slight into lake
EROSION	None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Pale yellow, clear, slight organic odour, no sheen.
SEDIMENT (describe as soil)	Silty SAND, pale grey and brown, fine grained, with organic matter, loose, saturated, organic odour

FIELD MEASUREMENTS

TEMPERATURE (°C)	22.1
DO (mg/L)	6.66
DO (%S)	74.20
CONDUCTIVITY (µS/cm)	227.1
pH (pH units)	5.94
REDOX (mV)	31.9
TDS (mg/L)	156.00

HYDROLOGICAL DATA

FLOW MEASUREMENT	Not flowing, lake, appears to have surface wind ripples
CROSS SECTION WIDTH (m)	>100
DEPTH (m)	Unsure, >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_SW034_250404				
0021_SD028_250404				

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_SW035
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	0021_SD029
CLIENT:	Department of Defence	**DATE:**	03/04/2025 **TIME:** 10:00:00 AM
SITE:	BNP / Lake McKenzie	**LOGGED BY:**	AT

COORDINATES/GPS *(if applicable)* 288754.65, 6108073.37, see Figure 4D. Historical ID: LM_SW04 (SW), LM_SD04 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** grab **SEDIMENT:** grab

DETAILED SAMPLE LOCATION DESCRIPTION small stream, unable to collect QC200 series, ran out of bottles

ENVIRONMENTAL OBSERVATIONS

WEATHER	sunny
VEGETATION	na
SLOPE	gentle slope towards ocean
EROSION	no

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	no odour, no sheen, no turbidity, tannin stain
SEDIMENT (describe as soil)	predominately sand, trace organic matter, no odour

FIELD MEASUREMENTS

TEMPERATURE (°C)	16.7
DO (mg/L)	5.37
DO (%S)	55.30
CONDUCTIVITY (µS/cm)	479.7
pH (pH units)	6.16
REDOX (mV)	190.6
TDS (mg/L)	

HYDROLOGICAL DATA

FLOW MEASUREMENT	steady stream flow
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?**
0021_SW035_250403	QC107	0021_QC107_250403		
0021_SD029_250403				

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_SW036
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	0021_SD030
CLIENT:	Department of Defence	**DATE:**	04/04/2025 **TIME:** 4:20:00 PM
SITE:	BNP / Lake Windermere	**LOGGED BY:**	AT

COORDINATES/GPS *(if applicable)* 288367.61, 6109121.67, see Figure 4D. Historical ID: LW_SW01 (SW), LW_SD01 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** grab **SEDIMENT:** grab

DETAILED SAMPLE LOCATION DESCRIPTION from bank at lake windermere

ENVIRONMENTAL OBSERVATIONS

WEATHER	sunny
VEGETATION	dead vegetation shrub
SLOPE	gentle slope to lake
EROSION	NA

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	clear, brown tinge, no odour, no sheen, no sediment
SEDIMENT (describe as soil)	gravelly sand with organic, no odour, dark brown to grey

FIELD MEASUREMENTS

TEMPERATURE (°C)	22.2
DO (mg/L)	3.16
DO (%S)	36.90
CONDUCTIVITY (µS/cm)	218.2
pH (pH units)	5.63
REDOX (mV)	74.3
TDS (mg/L)	

HYDROLOGICAL DATA

FLOW MEASUREMENT	na
CROSS SECTION WIDTH (m)	na
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?**
0021_SW036_250404				
0021_SD030_250404				

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:**	0021_SD031
CLIENT:	Department of Defence	**DATE:**	07/04/2025 **TIME:** 8:36:00 AM
SITE:	JBRF / Lake Windermere	**LOGGED BY:**	AD/JM

COORDINATES/GPS *(if applicable)* 287861.99, 6108927.06, see Figure 4D. Historical ID: LW_SW02 (SW), LW_SD02 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** Grab **SEDIMENT:** Grab

DETAILED SAMPLE LOCATION DESCRIPTION On GPS co-ordinates, on shore of Lake, in front of depth marker boom

ENVIRONMENTAL OBSERVATIONS

WEATHER	Clear
VEGETATION	Trees and shrubs within shallow water, dead
SLOPE	Slight to flat
EROSION	None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Pale yellow tinge, clear, no odour, no sheen, tannin colour in water, foam/bubbles on bank
SEDIMENT (describe as soil)	Sandy SILT, brown-grey, sand fine grained, trace gravel, trace organics, no odour, no staining

FIELD MEASUREMENTS

TEMPERATURE (°C)	20.4
DO (mg/L)	5.55
DO (%S)	61.70
CONDUCTIVITY (µS/cm)	85.6
pH (pH units)	5.84
REDOX (mV)	137.60
TDS (mg/L)	61.10

HYDROLOGICAL DATA

FLOW MEASUREMENT	Stagnant (Lake)
CROSS SECTION WIDTH (m)	>100 (Lake)
DEPTH (m)	<0.5 (Sample depth)
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_250407				Yes
0021_SD031_250407				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_SW038
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	0021_SD032
CLIENT:	Department of Defence	**DATE:**	07/04/2025 **TIME:** 8:00:00 AM
SITE:	BNP / Lake Windermere	**LOGGED BY:**	AD/JW

COORDINATES/GPS *(if applicable)* 288212.17, 6109606.52, see Figure 3. Historical ID: LW_SW03 (SW), LW_SD03 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION No access, vegetation too thick, unsafe access

ENVIRONMENTAL OBSERVATIONS

WEATHER

VEGETATION

SLOPE

EROSION

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen): No access, vegetation too thick, unsafe access

SEDIMENT (describe as soil): No access, vegetation too thick, unsafe access

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): No access, unsafe, vegetation too thick

SURFACE WATER AND SEDIMENT SAMPLING RECORD

PROJECT NO.:	12626622	**SURFACE WATER ID:**	0021_SW040
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	0021_SD093
CLIENT:	Department of Defence	**DATE:**	04/04/2025 **TIME:** 4:25:00 PM
SITE:	JBRF / Lake Windermere	**LOGGED BY:**	AT

COORDINATES/GPS *(if applicable)* 288389.42, 6109072.68, see Figure 4D. Historical ID: LW_SW05 (SW), LW_SD05 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** grab **SEDIMENT:** grab

DETAILED SAMPLE LOCATION DESCRIPTION from bank at lake windermere

ENVIRONMENTAL OBSERVATIONS

WEATHER	sunny
VEGETATION	dead shrub and trees
SLOPE	gentle slope to lake
EROSION	NA

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	clear, brown tinge, no odour, no sheen, no sediment
SEDIMENT (describe as soil)	gravelly sand with organic, no odour, dark brown to grey

FIELD MEASUREMENTS

TEMPERATURE (°C)	22.3
DO (mg/L)	3.18
DO (%S)	36.70
CONDUCTIVITY (µS/cm)	196.1
pH (pH units)	5.87
REDOX (mV)	30.0
TDS (mg/L)	

HYDROLOGICAL DATA

FLOW MEASUREMENT	NA
CROSS SECTION WIDTH (m)	NA
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?**
0021_SW040_250404				
0021_SD093_250404	QC111, QC211	0021_QC111_250404	0021_QC211_250404	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_SW043
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	0021_SD035
CLIENT:	Department of Defence	**DATE:**	01/04/2025 **TIME:** 2:02:00 PM
SITE:	403 Lands / Mary Creek	**LOGGED BY:**	AT

COORDINATES/GPS *(if applicable)* See Figure 4C. Historical ID: MC_SW01 (SW), MC_SD01 (SED)

SAMPLING METHOD
(ie grab, bucket; if dry leave blank) **SURFACE WATER:** grab **SEDIMENT:** grab

DETAILED SAMPLE LOCATION DESCRIPTION mary creek

ENVIRONMENTAL OBSERVATIONS

WEATHER	cloudy, rainy and windy
VEGETATION	reeds along of edge of water
SLOPE	steep dunes either side of water
EROSION	dune erosion adjacent to waterway

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	dark tanin, low turbidity, no odour, no sheen, no foam
SEDIMENT (describe as soil)	medium grain sand, small amount of organic matter

FIELD MEASUREMENTS

TEMPERATURE (°C)	19.1
DO (mg/L)	5.58
DO (%S)	
CONDUCTIVITY (µS/cm)	308.4
pH (pH units)	5.74
REDOX (mV)	17.5
TDS (mg/L)	225.90

HYDROLOGICAL DATA

FLOW MEASUREMENT	low flow area
CROSS SECTION WIDTH (m)	15
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_SW043_250401				
0021_SD035_250401				

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:**	01/04/2025 **TIME:** 12:51:00 PM
SITE:	403 Lands / Mary Creek	**LOGGED BY:**	AT

COORDINATES/GPS *(if applicable)* See Figure 4C. Historical ID: MC_SW02 (SW), MC_SD02 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** grab **SEDIMENT:** grab

DETAILED SAMPLE LOCATION DESCRIPTION adjacent to rock waterfall and within creek flow. sample taken after the mixing of three runoffs eg, waterfall

ENVIRONMENTAL OBSERVATIONS

WEATHER	cloudy and windy
VEGETATION	ferns, leaf litternon ground, trees leaning over creek
SLOPE	steep slope either side of creek with rock waterfall one side and vegetated slope other
EROSION	some slight erosion south east bank where water has flowed over ground exposing tree roote

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	slight tanin stain, no turbidity, no odour, no sheen, foam present on water surface
SEDIMENT (describe as soil)	course grain sand mixed with organic matter

FIELD MEASUREMENTS

TEMPERATURE (°C)	18.6
DO (mg/L)	8.70
DO (%S)	
CONDUCTIVITY (µS/cm)	208.0
pH (pH units)	4.86
REDOX (mV)	101.0
TDS (mg/L)	154.00

HYDROLOGICAL DATA

FLOW MEASUREMENT	fast flowing upstream and adjacent flow from waterfall
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?
0021_SW044_250401				
0021_SD036_250401				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:**	0021_SW045
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	0021_SD037
CLIENT:	Department of Defence	**DATE:**	01/04/2025 **TIME:** 11:52:00 AM
SITE:	403 Lands / Mary Creek	**LOGGED BY:**	AT

COORDINATES/GPS *(if applicable)* See Figure 4C. Historical ID: MC_SW03 (SW), MC_SD03 (SED)

SAMPLING METHOD
(ie grab, bucket; if dry leave blank) **SURFACE WATER:** grab **SEDIMENT:** grab

DETAILED SAMPLE LOCATION DESCRIPTION creek at pipe outlet

ENVIRONMENTAL OBSERVATIONS

WEATHER	overcast and windy
VEGETATION	dense vegetation, grasses and ferns
SLOPE	steep slope down to creek
EROSION	no visible erosion either side of creek

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	dark tanin, low turbidity, no odour, no sheen, no foam
SEDIMENT (describe as soil)	dark silty sand sediment with organic matter

FIELD MEASUREMENTS

TEMPERATURE (°C)	18.3
DO (mg/L)	7.02
DO (%S)	
CONDUCTIVITY (µS/cm)	277.0
pH (pH units)	4.74
REDOX (mV)	84.8
TDS (mg/L)	206.50

HYDROLOGICAL DATA

FLOW MEASUREMENT	no visible flow
CROSS SECTION WIDTH (m)	3
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_SW045_250401				
0021_SD037_250401				

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:**	03/04/2025 **TIME:** 3:39:00 PM
SITE:	JBRF / Mary Creek	**LOGGED BY:**	ES/AD/AK

COORDINATES/GPS *(if applicable)* 289870.79, 6107513.25, see Figure 4A. Historical ID: MC_SW06 (SW), MC_SD06 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** Grab **SEDIMENT:** Grab

DETAILED SAMPLE LOCATION DESCRIPTION

ENVIRONMENTAL OBSERVATIONS

WEATHER	Clear
VEGETATION	Shrubs overhanging channel
SLOPE	Shallow to flat
EROSION	None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Pale brown tinge, clear, no odour, no sheen
SEDIMENT (describe as soil)	Gravelly SAND, fine to medium grain, sub-rounded to rounded, grey-brown, gravel fine to medium grained, angular to sub-angular, with roots, no odour, no staining

FIELD MEASUREMENTS

TEMPERATURE (°C)	17.0
DO (mg/L)	4.61
DO (%S)	48.00
CONDUCTIVITY (µS/cm)	404.0
pH (pH units)	5.72
REDOX (mV)	57.0
TDS (mg/L)	304.20

HYDROLOGICAL DATA

FLOW MEASUREMENT	Stagnant, no flow
CROSS SECTION WIDTH (m)	<1.5
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_SW048_250403				No
0021_SD040_250403				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_SW051
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	0021_SD043
CLIENT:	Department of Defence	**DATE:**	03/04/2025 **TIME:** 8:45:00 AM
SITE:	403 Lands / Mary Creek	**LOGGED BY:**	JM

COORDINATES/GPS *(if applicable)* See Figure 4C. Historical ID: MC_SW09 (SW), MC_SD09 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** Grab **SEDIMENT:** Grab

DETAILED SAMPLE LOCATION DESCRIPTION Sample taken from ocean, directly out from Mary Creek outlet, 20 m from shore

ENVIRONMENTAL OBSERVATIONS

WEATHER	Fine, sunny
VEGETATION	n/a
SLOPE	n/a
EROSION	n/a

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Clear, moderate turbidity, no sheen no odour,
SEDIMENT (describe as soil)	Pale brown, fine to coarse grained sand

FIELD MEASUREMENTS

TEMPERATURE (°C)	20.6
DO (mg/L)	5.11
DO (%S)	82.40
CONDUCTIVITY (µS/cm)	44966.0
pH (pH units)	8.11
REDOX (mV)	144.3
TDS (mg/L)	1250.00

HYDROLOGICAL DATA

FLOW MEASUREMENT	not flowing, ocean
CROSS SECTION WIDTH (m)	n//a
DEPTH (m)	0.6
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_SW051_250403				
0021_SD043_250403				

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_SW052
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	0021_SD044
CLIENT:	Department of Defence	**DATE:**	01/04/2025 **TIME:** 1:42:00 PM
SITE:	403 Lands / Mary Creek	**LOGGED BY:**	AT

COORDINATES/GPS *(if applicable)* See Figure 4C. Historical ID: MC_SW10 (SW), MC_SD10 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** grab **SEDIMENT:** grab

DETAILED SAMPLE LOCATION DESCRIPTION creek mouth located at beach. sample taken from mid

ENVIRONMENTAL OBSERVATIONS

WEATHER	overcast, windy, rainy
VEGETATION	dune vegetation adjacent to creek, grasses, pigs face
SLOPE	flat beach, steep dunes
EROSION	waves entering creek mouth, meandering creek

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	very slight tanin staining in water mixed with ocean water, no odour, no sheen
SEDIMENT (describe as soil)	fine to medium grain sand

FIELD MEASUREMENTS

TEMPERATURE (°C)	19.9
DO (mg/L)	6.98
DO (%S)	
CONDUCTIVITY (µS/cm)	2591.0
pH (pH units)	6.67
REDOX (mV)	111.0
TDS (mg/L)	1864.00

HYDROLOGICAL DATA

FLOW MEASUREMENT	fast flowing
CROSS SECTION WIDTH (m)	1.5
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_SW052_250401				
0021_SD044_250401	QC104, QC204	0021_QC104_250401	0021_QC204_250401	

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:**	0021_SD111
CLIENT:	Department of Defence	**DATE:**	01/04/2025 **TIME:** 12:19:00 PM
SITE:	403 Lands / Mary Creek	**LOGGED BY:**	AT

COORDINATES/GPS *(if applicable)* See Figure 4C. Historical ID: MC_SW11 (SW)

SAMPLING METHOD
(ie grab, bucket; if dry leave blank) **SURFACE WATER:** grab **SEDIMENT:** grab

DETAILED SAMPLE LOCATION DESCRIPTION water sample upstream of rock causway/waterfall running through road, mary creek catchment. very difficult to obtain sediment predominantly rock. sediment taken from edge of creek.

ENVIRONMENTAL OBSERVATIONS

WEATHER	cloudy and windy
VEGETATION	dense vegetation either side of creek, ferns, grasses
SLOPE	very gentle gradual slope in direction of water flow
EROSION	no visible erosion

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	low turbidity, tanin staining, no odour, no sheen, foam observed downstream of culvert
SEDIMENT (describe as soil)	sediment taken from edge of creek as creek was all rock. organic, small roots, dark brown

FIELD MEASUREMENTS

TEMPERATURE (°C)	18.4
DO (mg/L)	7.20
DO (%S)	
CONDUCTIVITY (µS/cm)	167.1
pH (pH units)	4.91
REDOX (mV)	73.8
TDS (mg/L)	124.30

HYDROLOGICAL DATA

FLOW MEASUREMENT	steady fast 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?**
0021_SW053_250401				
0021_SD111_250401				

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_SW056
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	0021_SD046
CLIENT:	Department of Defence	**DATE:**	01/04/2025 **TIME:** 2:30:00 PM
SITE:	403 Lands / Summercloud Creek	**LOGGED BY:**	ES / AK

COORDINATES/GPS *(if applicable)* See Figure 4C. Historical ID: SC_SW01 (SW), SC_SD01 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** Grab **SEDIMENT:** Hand Auger

DETAILED SAMPLE LOCATION DESCRIPTION Bush bash off beach access track near 0021_MW131

ENVIRONMENTAL OBSERVATIONS

WEATHER	Overcast, windy
VEGETATION	Dense coastal shrubs
SLOPE	Steep
EROSION	No

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Yellow, clear, no odour or sheen
SEDIMENT (describe as soil)	Sand, grey, with organic matter, no odour (leaves, sticks)

FIELD MEASUREMENTS

TEMPERATURE (°C)	18.9
DO (mg/L)	3.79
DO (%S)	41.40
CONDUCTIVITY (µS/cm)	4064.0
pH (pH units)	5.73
REDOX (mV)	128.0
TDS (mg/L)	2990.00

HYDROLOGICAL DATA

FLOW MEASUREMENT	Surface wind flows, slight, approx 0.05 m/s
CROSS SECTION WIDTH (m)	12
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_SW056_250401				
0021_SD046_250401				

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:**	0021_SD047
CLIENT:	Department of Defence	**DATE:**	01/04/2025 **TIME:** 12:00:00 PM
SITE:	403 Lands / Summercloud Creek	**LOGGED BY:**	ES / AK

COORDINATES/GPS *(if applicable)* See Figure 4C. Historical ID: SC_SW02 (SW), SC_SD02 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** Grab **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION Creek off road, near culvert outlet

ENVIRONMENTAL OBSERVATIONS

WEATHER	Sunny, slight rain
VEGETATION	Some bush scrub overhanging creek, lots of leaf debris and sticks
SLOPE	Steep
EROSION	No

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Pale yellow, clear, no odour or sheen.
SEDIMENT (describe as soil)	Not sampled - rocky

FIELD MEASUREMENTS

TEMPERATURE (°C)	17.0
DO (mg/L)	7.09
DO (%S)	73.40
CONDUCTIVITY (µS/cm)	509.0
pH (pH units)	4.34
REDOX (mV)	237.9
TDS (mg/L)	390.00

HYDROLOGICAL DATA

FLOW MEASUREMENT	Fast, 1m/s at fastest point
CROSS SECTION WIDTH (m)	2
DEPTH (m)	0.5
OTHER	Some foam flowing on surface

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_250401				

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:**	0021_SD048
CLIENT:	Department of Defence	**DATE:**	01/04/2025 **TIME:** 12:30:00 PM
SITE:	403 Lands / Summercloud Creek	**LOGGED BY:**	ES / AK

COORDINATES/GPS *(if applicable)* See Figure 4C. Historical ID: SC_SW03 (SW), SC_SD03 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** Grab **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION Summercloud Creek, walked along access track from road, climbed down into channel to creek

ENVIRONMENTAL OBSERVATIONS

WEATHER	Sunny, slight rain
VEGETATION	Dense bush shrub, sticks, leaf debris
SLOPE	Steep
EROSION	No

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Pale yellow, clear, no odour or sheen, foam on surface
SEDIMENT (describe as soil)	Not present in or around location, or in a safe location to sample

FIELD MEASUREMENTS

TEMPERATURE (°C)	17.4
DO (mg/L)	7.38
DO (%S)	78.10
CONDUCTIVITY (µS/cm)	205.4
pH (pH units)	3.98
REDOX (mV)	232.2
TDS (mg/L)	156.00

HYDROLOGICAL DATA

FLOW MEASUREMENT	Fast, 1m/s at fastest point
CROSS SECTION WIDTH (m)	2
DEPTH (m)	0.5
OTHER	Lots of foam flowing on surface, see picture.

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_250401				

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_SW059
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	0021_SD049
CLIENT:	Department of Defence	**DATE:**	04/04/2025 **TIME:** 2:41:00 PM
SITE:	403 Lands / Summercloud Creek	**LOGGED BY:**	ES / AD

COORDINATES/GPS *(if applicable)* See Figure 4A. Historical ID: SC_SW04 (SW), SC_SD04 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** Grab **SEDIMENT:** Grab

DETAILED SAMPLE LOCATION DESCRIPTION On GPS coordinates, off gravel road in boggy path with native grasses

ENVIRONMENTAL OBSERVATIONS

WEATHER	Sunny
VEGETATION	Dead trees surrounding this sample location, approx 20m every direction
SLOPE	Slight into lake
EROSION	None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Pale yellow, clear, slight organic odour, no sheen.
SEDIMENT (describe as soil)	Sandy SILT, dark brown, with organic matter, organic odour, no staining

FIELD MEASUREMENTS

TEMPERATURE (°C)	23.2
DO (mg/L)	3.70
DO (%S)	43.50
CONDUCTIVITY (µS/cm)	247.1
pH (pH units)	3.03
REDOX (mV)	190.3
TDS (mg/L)	167.05

HYDROLOGICAL DATA

FLOW MEASUREMENT	Small ponded areas in boggy patch, not flowing, stagnant
CROSS SECTION WIDTH (m)	3
DEPTH (m)	0.02
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_SW059_250404				
0021_SD049_250404				

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_SW060
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	0021_SD050
CLIENT:	Department of Defence	**DATE:**	01/04/2025 **TIME:** 9:26:00 AM
SITE:	BNP / Telegraph Creek	**LOGGED BY:**	AT

COORDINATES/GPS *(if applicable)* 292494.99, 6109329.25, see Figure 4E. Historical ID: TC_SW01 (SW), TC_SD01 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** grab **SEDIMENT:** grab

DETAILED SAMPLE LOCATION DESCRIPTION bottom of telegraph creek waterfall in the lagoon

ENVIRONMENTAL OBSERVATIONS

WEATHER	overcast
VEGETATION	medium to dense well established vegetation. grass and reeds sides of creek bank
SLOPE	gentle to moderat slope towards lagoon overall grade northerly fall
EROSION	not applicable, creek bank on rock sampling area heavily vegetated no erosion

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	dark tanin, low turbidity, no odour, no sheen, visible foam (organic and non natural)
SEDIMENT (describe as soil)	dark brown with organic matter, silty sand, no odour

FIELD MEASUREMENTS

TEMPERATURE (°C)	18.9
DO (mg/L)	5.62
DO (%S)	
CONDUCTIVITY (µS/cm)	1687.0
pH (pH units)	5.65
REDOX (mV)	-95.6
TDS (mg/L)	1413.00

HYDROLOGICAL DATA

FLOW MEASUREMENT	at sample location low flow adjacent to base of flowing waterfall
CROSS SECTION WIDTH (m)	20
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_SW060_250401				
0021_SD050_250401				

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_SW062
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	0021_SD052
CLIENT:	Department of Defence	**DATE:**	02/04/2025 **TIME:**
SITE:	BNP / Telegraph Creek	**LOGGED BY:**	ES / AT

COORDINATES/GPS *(if applicable)* 292511.83, 6108952.3, see Figure 4E. Historical ID: TC_SW03 (SW), TC_SD03 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** Grab **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION Upstream of road culvert

ENVIRONMENTAL OBSERVATIONS

WEATHER	Sunny
VEGETATION	Dense native bush scrub on banks
SLOPE	Steep from road side, slight on bank sides
EROSION	None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Pale brown, clear, no odour or sheen
SEDIMENT (describe as soil)	Rocky, no sediment to sample

FIELD MEASUREMENTS

TEMPERATURE (°C)	17.3
DO (mg/L)	8.00
DO (%S)	83.30
CONDUCTIVITY (µS/cm)	177.6
pH (pH units)	4.32
REDOX (mV)	137.8
TDS (mg/L)	134.20

HYDROLOGICAL DATA

FLOW MEASUREMENT	Fast, approximately 1m/s
CROSS SECTION WIDTH (m)	Creek stream is approximately 1.5m wide, rock channel is approximately 8m wide
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_SW062_250402				

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_SW064
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	0021_SD054
CLIENT:	Department of Defence	**DATE:**	02/04/2025 **TIME:**
SITE:	BNP / Telegraph Creek	**LOGGED BY:**	ES / AT

COORDINATES/GPS *(if applicable)* 291785.65, 6109094.41, see Figure 4E. Historical ID: TC_SW05 (SW), TC_SD05 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** grab **SEDIMENT:** grab

DETAILED SAMPLE LOCATION DESCRIPTION took small flowing pond off jervis bay road culvert

ENVIRONMENTAL OBSERVATIONS

WEATHER	sunny
VEGETATION	dense shrub, reeds
SLOPE	steep slope from road towards wetland
EROSION	NA

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	no turbidity, tannin staining, odourless, no sheen
SEDIMENT (describe as soil)	peat like, organic matter, dark brown, silt, no odour

FIELD MEASUREMENTS

TEMPERATURE (°C)	17.2
DO (mg/L)	3.75
DO (%S)	38.10
CONDUCTIVITY (µS/cm)	183.6
pH (pH units)	4.16
REDOX (mV)	211.7
TDS (mg/L)	140.40

HYDROLOGICAL DATA

FLOW MEASUREMENT	steady trickle
CROSS SECTION WIDTH (m)	4
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_SW064_250402	QC136, QC236	0021_QC136_250402	0021_QC236_250402	
0021_SD054_250402	QC135, QC235	0021_QC135_250402	0021_QC235_250402	

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

SURFACE WATER AND SEDIMENT SAMPLING RECORD

PROJECT NO.:	12626622	**SURFACE WATER ID:**	0021_SW068
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	0021_SD058
CLIENT:	Department of Defence	**DATE:**	01/04/2025 **TIME:** 8:55:00 AM
SITE:	JBRF / Telegraph Creek	**LOGGED BY:**	AT

COORDINATES/GPS *(if applicable)* 292568.59, 6109413.15, see Figure 4E. Historical ID: TC_SW09 (SW), TC_SD09 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** grab **SEDIMENT:** grab

DETAILED SAMPLE LOCATION DESCRIPTION Side of creek, near where dunes start.

ENVIRONMENTAL OBSERVATIONS

WEATHER	overcast windy
VEGETATION	vegetation along bank of creek, grasses, sand on beach side
SLOPE	very gentle slope from beach side into creek
EROSION	nil, meandering creek

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	very dark tanin colour, low turbidity, leaf litter, no sheen, no odour, small amount of foam
SEDIMENT (describe as soil)	fine to medium grained sand, white sand, trace organic matter

FIELD MEASUREMENTS

TEMPERATURE (°C)	18.8
DO (mg/L)	4.88
DO (%S)	
CONDUCTIVITY (µS/cm)	497.0
pH (pH units)	4.82
REDOX (mV)	-25.6
TDS (mg/L)	4.87

HYDROLOGICAL DATA

FLOW MEASUREMENT	low flow
CROSS SECTION WIDTH (m)	10
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_SW068_250401	QC103, QC203	0021_QC103_250401	0021_QC203_250401	
0021_SD058_250401				

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_SW069
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	0021_SD059
CLIENT:	Department of Defence	**DATE:**	01/04/2025 **TIME:**
SITE:	BNP / Telegraph Creek	**LOGGED BY:**	AT

COORDINATES/GPS *(if applicable)* 292759.14, 6109490.85, see Figure 4E. Historical ID: TC_SW10 (SW), TC_SD10 (SED)

SAMPLING METHOD
(ie grab, bucket; if dry leave blank) **SURFACE WATER:** grab **SEDIMENT:** grab

DETAILED SAMPLE LOCATION DESCRIPTION

ENVIRONMENTAL OBSERVATIONS

WEATHER	overcast, rainy and windy
VEGETATION	beach creek entrance, seaweed
SLOPE	gentle slope towards creek
EROSION	tidal sand movement

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	tanin stained, no turbidity
SEDIMENT (describe as soil)	fine to medium grain sand

FIELD MEASUREMENTS

TEMPERATURE (°C)	17.8
DO (mg/L)	5.15
DO (%S)	
CONDUCTIVITY (µS/cm)	14993.0
pH (pH units)	6.90
REDOX (mV)	-2.8
TDS (mg/L)	11307.00

HYDROLOGICAL DATA

FLOW MEASUREMENT	flowing to ocean, clear mixing zone, seperation of bay and creek water not mixed then as waves come in mixes
CROSS SECTION WIDTH (m)	8
DEPTH (m)	0.2m
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_SW069_250401				
0021_SD059_250401				

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:**	02/04/2025 **TIME:** 9:55:00 AM
SITE:	403 Lands / Unnamed Water Bodies	**LOGGED BY:**	ES

COORDINATES/GPS *(if applicable)* See Figure 4A. Historical ID: UN2_SW01 (SW), UN2_SD01 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** Grab **SEDIMENT:** Trowel

DETAILED SAMPLE LOCATION DESCRIPTION Off ring road

ENVIRONMENTAL OBSERVATIONS

WEATHER	Sunny
VEGETATION	Dense native shrub
SLOPE	Slight down from road, into clay pool
EROSION	None

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Light brown, no odour, no sheen, low turbidity
SEDIMENT (describe as soil)	Silt, dark brown, with organic matter, organic odour

FIELD MEASUREMENTS

TEMPERATURE (°C)	16.7
DO (mg/L)	1.08
DO (%S)	11.30
CONDUCTIVITY (µS/cm)	222.0
pH (pH units)	5.60
REDOX (mV)	14.6
TDS (mg/L)	172.30

HYDROLOGICAL DATA

FLOW MEASUREMENT	Stagnant, pond, no flow
CROSS SECTION WIDTH (m)	40
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_SW076_250402				
0021_SD066_250402				

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:**	02/04/2025 **TIME:** 9:40:00 AM
SITE:	403 Lands / Unnamed Water Bodies	**LOGGED BY:**	ES

COORDINATES/GPS *(if applicable)* See Figure 4A. Historical ID: UN2_SW02 (SW), UN2_SD02 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** **SEDIMENT:** Trowel

DETAILED SAMPLE LOCATION DESCRIPTION Off ring road, dry channel

ENVIRONMENTAL OBSERVATIONS

WEATHER	Sunny
VEGETATION	Dense native shrub
SLOPE	Moderate on both sides, channel
EROSION	

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	DRY.
SEDIMENT (describe as soil)	Silty, trace sand, high organic matter, dry, fine to medium grained, loose

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?**
0021_SD067_250402				

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:**	02/04/2025 **TIME:** 9:30:00 AM
SITE:	403 Lands / Unnamed Water Bodies	**LOGGED BY:**	ES

COORDINATES/GPS *(if applicable)* See Figure 4A. Historical ID: UN2_SW03 (SW), UN2_SD03 (SED)

SAMPLING METHOD
(ie grab, bucket; if dry leave blank) **SURFACE WATER:** Pole **SEDIMENT:** Hand auger

DETAILED SAMPLE LOCATION DESCRIPTION Clay pool

ENVIRONMENTAL OBSERVATIONS

WEATHER	Sunny
VEGETATION	Reeds, native shrub
SLOPE	Mostly flat, gentle slope towards pool
EROSION	

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Pale brown, low turbidity, no odour, no sheen
SEDIMENT (describe as soil)	Silt, dark brown, with organic matter, organic odour

FIELD MEASUREMENTS

TEMPERATURE (°C)	17.1
DO (mg/L)	4.17
DO (%S)	40.20
CONDUCTIVITY (µS/cm)	221.6
pH (pH units)	5.83
REDOX (mV)	135.1
TDS (mg/L)	169.80

HYDROLOGICAL DATA

FLOW MEASUREMENT	Stagnant, pond, no flow.
CROSS SECTION WIDTH (m)	25
DEPTH (m)	<1.0
OTHER	Higher water level than previous OMP

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_250402				
0021_SD068_250402				

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:**	02/04/2025 **TIME:** 8:54:00 AM
SITE:	403 Lands / Unnamed Water Bodies	**LOGGED BY:**	ES

COORDINATES/GPS *(if applicable)* See Figure 4A. Historical ID: UN2_SW04 (SW), UN2_SD04 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** Pole **SEDIMENT:** Hand auger

DETAILED SAMPLE LOCATION DESCRIPTION Clay pool

ENVIRONMENTAL OBSERVATIONS

WEATHER	Sunny
VEGETATION	Reeds, native shrub
SLOPE	Mostly flat, gentle slope towards pool
EROSION	

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Pale brown, low turbidity, no odour, no sheen
SEDIMENT (describe as soil)	Silt, dark brown, with organic matter, no odour, white clay underneath

FIELD MEASUREMENTS

TEMPERATURE (°C)	16.4
DO (mg/L)	3.94
DO (%S)	40.70
CONDUCTIVITY (µS/cm)	223.4
pH (pH units)	5.86
REDOX (mV)	142.7
TDS (mg/L)	170.95

HYDROLOGICAL DATA

FLOW MEASUREMENT	Stagnant, pond, no flow.
CROSS SECTION WIDTH (m)	30
DEPTH (m)	>1.0
OTHER	Higher water level than previous OMP

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_250402				
0021_SD069_250402				

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:**	0021_SD070
CLIENT:	Department of Defence	**DATE:**	02/04/2025 **TIME:** 8:22:00 AM
SITE:	403 Lands / Unnamed Water Bodies	**LOGGED BY:**	ES

COORDINATES/GPS *(if applicable)* See Figure 4A. Historical ID: UN2_SW05 (SW), UN2_SD05 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** Pole **SEDIMENT:** Trowel

DETAILED SAMPLE LOCATION DESCRIPTION Clay pool

ENVIRONMENTAL OBSERVATIONS

WEATHER	Sunny
VEGETATION	Reeds, native shrub
SLOPE	Mostly flat, gentle slope towards pool
EROSION	Evidence of vegetation debris

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	Pale brown, low turbidity, no odour, no sheen
SEDIMENT (describe as soil)	Silt, dark brown, with organic matter, slight organic odour

FIELD MEASUREMENTS

TEMPERATURE (°C)	17.5
DO (mg/L)	5.27
DO (%S)	55.10
CONDUCTIVITY (µS/cm)	142.1
pH (pH units)	6.01
REDOX (mV)	143.5
TDS (mg/L)	107.90

HYDROLOGICAL DATA

FLOW MEASUREMENT	Stagnant
CROSS SECTION WIDTH (m)	30
DEPTH (m)	Greater than 0.5m
OTHER	Found white clay under brown sediment sample

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_250402				
0021_SD070_250402				

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_SW083
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	0021_SD073
CLIENT:	Department of Defence	**DATE:**	04/04/2025 **TIME:** 10:45:00 AM
SITE:	BNP / Ryan's Swamp	**LOGGED BY:**	AT

COORDINATES/GPS *(if applicable)* See Figure 3. Historical ID: UN3_SW03 (SW), UN3_SD03 (SED)

SAMPLING METHOD
(ie grab, bucket; if dry leave blank) **SURFACE WATER:** grab **SEDIMENT:** grab

DETAILED SAMPLE LOCATION DESCRIPTION bank of ryans swamp at end of road entrance

ENVIRONMENTAL OBSERVATIONS

WEATHER	sunny
VEGETATION	dead vegetation , shrub, swamp, grasses
SLOPE	gentle slope to swamp
EROSION	NA

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	clear, brown tinge, no odour, no sheen, no sediment
SEDIMENT (describe as soil)	sand with organic matter, no odour, dark brown to grey

FIELD MEASUREMENTS

TEMPERATURE (°C)	20.2
DO (mg/L)	3.86
DO (%S)	42.70
CONDUCTIVITY (µS/cm)	625.0
pH (pH units)	6.79
REDOX (mV)	-32.9
TDS (mg/L)	

HYDROLOGICAL DATA

FLOW MEASUREMENT	na
CROSS SECTION WIDTH (m)	greater than 20m
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?**
0021_SW083_250404				
0021_SD073_250404	QC110, QC210	0021_QC110_250404	0021_QC210_250404	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_SW085
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	0021_SD075
CLIENT:	Department of Defence	**DATE:**	01/04/2025 **TIME:** 10:40:00 AM
SITE:	403 Lands / Unnamed Water Bodies	**LOGGED BY:**	AT

COORDINATES/GPS *(if applicable)* See Figure 4C. Historical ID: UN3_SW05 (SW), UN3_SD05 (SED)

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** grab **SEDIMENT:** grab

DETAILED SAMPLE LOCATION DESCRIPTION

ENVIRONMENTAL OBSERVATIONS

WEATHER	0vercast, very windy
VEGETATION	not applicable, small amount of seaweed
SLOPE	30 degree slope to flat rock shelf
EROSION	tidal sand movement, rock shelf

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	suspended sand in waves causing slight turbidity, no odour, no sheen
SEDIMENT (describe as soil)	sampled from within a rock pool on rock shelf, fine to medium grain sand present

FIELD MEASUREMENTS

TEMPERATURE (°C)	20.0
DO (mg/L)	6.55
DO (%S)	
CONDUCTIVITY (µS/cm)	46588.0
pH (pH units)	7.99
REDOX (mV)	15.7
TDS (mg/L)	33489.00

HYDROLOGICAL DATA

FLOW MEASUREMENT	wind waves 0.5m
CROSS SECTION WIDTH (m)	ocean
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?**
0021_SW085_250401				
0021_SD075_250401				

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:**	03/04/2025 **TIME:** 12:10:00 PM
SITE:	JBRF / AEC A	**LOGGED BY:**	ES

COORDINATES/GPS *(if applicable)* 290742.283, 6107645.754, see Figure 4A.

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** Grab **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION Culvert outlet in grassed area, near building S482

ENVIRONMENTAL OBSERVATIONS

WEATHER	Sunny
VEGETATION	Grass only
SLOPE	Slight downhill from RAN SSSS entrance
EROSION	None

DESCRIPTIONS

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

FIELD MEASUREMENTS

TEMPERATURE (°C)	20.2
DO (mg/L)	6.51
DO (%S)	71.30
CONDUCTIVITY (µS/cm)	291.4
pH (pH units)	7.29
REDOX (mV)	40.5
TDS (mg/L)	208.65

HYDROLOGICAL DATA

FLOW MEASUREMENT	Moderate to fast out of stormwater pipe, approximately 0.5 m/s
CROSS SECTION WIDTH (m)	Flowing stream is approximately 5 to 10cm wide
DEPTH (m)	0.01
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_SW110_250403				

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_SW111
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	
CLIENT:	Department of Defence	**DATE:**	03/04/2025 **TIME:** 12:00:00 PM
SITE:	JBRF / AEC A	**LOGGED BY:**	ES

COORDINATES/GPS *(if applicable)* 290777.142, 6107650.561, see Figure 4E.

SAMPLING METHOD
(ie grab, bucket; if dry leave blank) **SURFACE WATER:** **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION Stormwater drain near road

ENVIRONMENTAL OBSERVATIONS

WEATHER	Sunny
VEGETATION	None
SLOPE	Slight downhill from RAN SSSS entrance
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	

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_SW112
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	
CLIENT:	Department of Defence	**DATE:**	03/04/2025 **TIME:** 11:40:00 AM
SITE:	JBRF / AEC A	**LOGGED BY:**	ES

COORDINATES/GPS *(if applicable)* 290766.145, 6107645.481, see Figure 4A.

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** Peri pump **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION Stormwater drain near road

ENVIRONMENTAL OBSERVATIONS

WEATHER	Sunny
VEGETATION	Grass only
SLOPE	Slight downhill from RAN SSSS entrance
EROSION	None

DESCRIPTIONS

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

FIELD MEASUREMENTS

TEMPERATURE (°C)	22.6
DO (mg/L)	4.55
DO (%S)	53.10
CONDUCTIVITY (µS/cm)	299.0
pH (pH units)	7.07
REDOX (mV)	13.8
TDS (mg/L)	202.15

HYDROLOGICAL DATA

FLOW MEASUREMENT	Moderate to fast out of stormwater pipe, approximately 0.5 m/s
CROSS SECTION WIDTH (m)	Flowing stream is approximately 5 to 10cm wide
DEPTH (m)	0.01
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_SW112_250403				

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_SW126
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	
CLIENT:	Department of Defence	**DATE:**	03/04/2025 **TIME:** 2:08:00 PM
SITE:	JBRF / AEC A	**LOGGED BY:**	ES

COORDINATES/GPS *(if applicable)* 290624, 6107914, see Figure 4A.

SAMPLING METHOD
(ie grab, bucket; if dry leave blank) **SURFACE WATER:** Grab **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION Pond of water on GPS location, not in channel near road, area is quite muddy and wet

ENVIRONMENTAL OBSERVATIONS

WEATHER	Sunny, windy
VEGETATION	Native scrub and reeds surrounding location
SLOPE	Mostly flat
EROSION	None

DESCRIPTIONS

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

FIELD MEASUREMENTS

TEMPERATURE (°C)	16.4
DO (mg/L)	4.17
DO (%S)	41.80
CONDUCTIVITY (µS/cm)	421.0
pH (pH units)	6.59
REDOX (mV)	16.2
TDS (mg/L)	327.00

HYDROLOGICAL DATA

FLOW MEASUREMENT	Not flowing, pond.
CROSS SECTION WIDTH (m)	1m x 0.4m
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_SW126_250403				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:**	0021_SW127
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	
CLIENT:	Department of Defence	**DATE:**	01/04/2025 **TIME:** 2:02:00 PM
SITE:	JBRF / AEC B	**LOGGED BY:**	AT

COORDINATES/GPS *(if applicable)* 290148, 6107464, see Figure 4A.

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** grab **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION MC5 drain

ENVIRONMENTAL OBSERVATIONS

WEATHER	cloudy, rainy and windy
VEGETATION	reeds, recently slashed adajcent to drain
SLOPE	drain
EROSION	slight erosion from road base

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	slight tannin stain, no odour, no sheen, some foaming
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	19.8
DO (mg/L)	6.87
DO (%S)	
CONDUCTIVITY (µS/cm)	373.5
pH (pH units)	6.11
REDOX (mV)	73.1
TDS (mg/L)	271.70

HYDROLOGICAL DATA

FLOW MEASUREMENT	steady flow
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?**
0021_SW127_250401				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:**	0021_SW130
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	
CLIENT:	Department of Defence	**DATE:**	03/04/2025 **TIME:** 2:44:00 PM
SITE:	JBRF / AEC A	**LOGGED BY:**	ES

COORDINATES/GPS *(if applicable)* 290675, 6107623, see Figure 4A.

SAMPLING METHOD
(ie grab, bucket; if dry leave blank) **SURFACE WATER:** Grab **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION

ENVIRONMENTAL OBSERVATIONS

WEATHER	Sunny
VEGETATION	Some grass nearby, some native shrubs
SLOPE	Mostly flat
EROSION	None

DESCRIPTIONS

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

FIELD MEASUREMENTS

TEMPERATURE (°C)	22.5
DO (mg/L)	3.83
DO (%S)	43.80
CONDUCTIVITY (µS/cm)	223.7
pH (pH units)	6.52
REDOX (mV)	50.2
TDS (mg/L)	158.40

HYDROLOGICAL DATA

FLOW MEASUREMENT	None, stagnant
CROSS SECTION WIDTH (m)	0.4
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_SW130_250403				

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_SW153
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	
CLIENT:	Department of Defence	**DATE:**	31/03/2025 **TIME:** 4:00:00 PM
SITE:	JBRF / AEC B	**LOGGED BY:**	AT/JM

COORDINATES/GPS *(if applicable)* 290246.73, 6107540.37, see Figure 4A.

SAMPLING METHOD
(ie grab, bucket; if dry leave blank) **SURFACE WATER:** grab **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION MC5 drain / culvert

ENVIRONMENTAL OBSERVATIONS

WEATHER	overcast and rain
VEGETATION	grass / reeds
SLOPE	drain
EROSION	road base bank erosion

DESCRIPTIONS

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

FIELD MEASUREMENTS

TEMPERATURE (°C)	19.8
DO (mg/L)	8.26
DO (%S)	
CONDUCTIVITY (µS/cm)	138.8
pH (pH units)	8.24
REDOX (mV)	16.3
TDS (mg/L)	99.80

HYDROLOGICAL DATA

FLOW MEASUREMENT	fast flow turbulent
CROSS SECTION WIDTH (m)	1.5
DEPTH (m)	0.2
OTHER	drain culvert

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_250331	QC102, QC202	0021_QC102_250331	0021_QC202_250331	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:**	0021_SW188
PROJECT NAME:	JBRF and HMAS Creswell PFAS OMP	**SEDIMENT ID:**	0021_SD188
CLIENT:	Department of Defence	**DATE:**	03/04/2025 **TIME:** 8:09:00 AM
SITE:	403 Lands / Summercloud Creek	**LOGGED BY:**	AT

COORDINATES/GPS *(if applicable)* See Figure 4C.

SAMPLING METHOD
(ie grab, bucket; if dry leave blank) **SURFACE WATER:** grab **SEDIMENT:** grab

DETAILED SAMPLE LOCATION DESCRIPTION fresh water drpping from the rocks, sediment from sand and clay. water quality meter was taken from a pool impacted by salt water

ENVIRONMENTAL OBSERVATIONS

WEATHER	sunny
VEGETATION	cliff vegetation, rocky
SLOPE	steep cliff
EROSION	no

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	tinge of brown, very light, no turbidity, no odour, no sheen
SEDIMENT (describe as soil)	beach sand, medium grained, no odour

FIELD MEASUREMENTS

TEMPERATURE (°C)	15.5
DO (mg/L)	3.66
DO (%S)	
CONDUCTIVITY (µS/cm)	34453.0
pH (pH units)	8.45
REDOX (mV)	147.7
TDS (mg/L)	2345.00

HYDROLOGICAL DATA

FLOW MEASUREMENT	Slight trickle of the rock. Swell crashing on rock, low tide.
CROSS SECTION WIDTH (m)	n/a
DEPTH (m)	n/a
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_250403				
0021_SD188_250403				
0021_SD188_A_250403				

OTHER COMMENTS FOR CONSIDERATION
(e.g. health and safety, access issues, change in location, general observation, notes for future): Additional sample 0021_SD188_A was collected approximately 10m from 0021_SD188, CLAY

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:**	03/04/2025 **TIME:** 9:09:00 AM
SITE:	403 Lands / Wreck Bay	**LOGGED BY:**	AT

COORDINATES/GPS *(if applicable)* See Figure 4C.

SAMPLING METHOD
(ie grab, bucket; if dry leave blank) **SURFACE WATER:** grab **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION fresh water drpping from the rocks, sediment from sand and clay. water quality meter was taken from a pool impacted by salt water

ENVIRONMENTAL OBSERVATIONS

WEATHER	sunny
VEGETATION	rock shelf
SLOPE	gentle slope towards ocean
EROSION	no

DESCRIPTIONS

SURFACE WATER (colour, turbidity, odour, sheen)	salt water, no odour, no sheen, no turbidity
SEDIMENT (describe as soil)	

FIELD MEASUREMENTS

TEMPERATURE (°C)	20.9
DO (mg/L)	
DO (%S)	105.60
CONDUCTIVITY (µS/cm)	86278.0
pH (pH units)	8.14
REDOX (mV)	131.3
TDS (mg/L)	

HYDROLOGICAL DATA

FLOW MEASUREMENT	ocean waves
CROSS SECTION WIDTH (m)	n/a
DEPTH (m)	n/a
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_250403				

OTHER COMMENTS FOR CONSIDERATION
(e.g. health and safety, access issues, change in location, general observation, notes for future): tds probe not calibrated

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:**	04/04/2025 **TIME:** 11:00:00 AM
SITE:	BNP / Bherwerre Barrier	**LOGGED BY:**	AT

COORDINATES/GPS *(if applicable)* 286718.410, 6107109.790, See Figure 3

SAMPLING METHOD *(ie grab, bucket; if dry leave blank)* **SURFACE WATER:** grab **SEDIMENT:**

DETAILED SAMPLE LOCATION DESCRIPTION bank of swamp, could not access directly on coordinates, very wet grounds

ENVIRONMENTAL OBSERVATIONS

WEATHER	sunny
VEGETATION	dead vegetation , shrub, swamp, grasses
SLOPE	gentle slope to swamp
EROSION	NA

DESCRIPTIONS

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

FIELD MEASUREMENTS

TEMPERATURE (°C)	21.9
DO (mg/L)	7.03
DO (%S)	80.50
CONDUCTIVITY (µS/cm)	818.0
pH (pH units)	6.05
REDOX (mV)	-20.7
TDS (mg/L)	

HYDROLOGICAL DATA

FLOW MEASUREMENT	na
CROSS SECTION WIDTH (m)	greater than 20m
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?**
0021_SW212_250404				

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

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